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ABSTRACT

These abstracts of 42 studies of extension program results, which make up the second volume of a two-volume resource, are intended to advise state administrative program leaders and others with program evaluation responsibilities of how to design studies of cooperative extension programs. Designed to support volume I, which refers to these abstracts, this volume provides examples of four basic study designs. The abstracts represent extension programs in agriculture, natural resources, community development, 4-H youth, home economics, and an overall county extension program. The studies are listed according to the four basic study designs that they exemplify: survey (ex-post facto), time-series, comparison group, and field experiment. Studies are ordered alphabetically within a design category by the author's name. An index alphabetically lists studies by author's name with program area categories. Each abstract follows this format: author(s), title, institution, year, number of pages, program description, evaluation approach/method, findings, and conclusion. An alphabetized index of studies concludes the volume. (YLB)

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TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

Foreword

This is Volume II of Designing Studies of Extension Program Results: A Resource for Program Leaders and Specialists. It contains abstracts of 42 studies of Extension program results and is meant to support Volume I, which refers to these abstracts.

Users should consult Volume I for introductory and background information on this two-volume resource for program leaders and specialists. However, for convenience, the Preface of Volume I reappears in Volume II immediately after this foreword.

PREFACE

For both accountability and administrative decisions there is increasing need for State Cooperative Extension program evaluation studies which are credible to State and Federal legislators and executives, university leaders and Extension administrators. This need is made apparent by the recently adopted Extension Accountability and Evaluation System. The system calls for the Extension Service, USDA, to provide staff development and technical assistance to State Extension Services' studies on the inputs, operations and impacts of Extension programs. In January 1983, Extension Service, USDA, entered into a cooperative agreement with the Maryland Cooperative Service through the University of Maryland's Department of Agricultural and Extension Education to develop and publish a resource publication on designing studies to evaluate the results of Cooperative Extension programs.

The purpose of this two-volume resource is to advise state administrative program leaders and others with program evaluation responsibilities on designing methodologically-defensible studies of program results including social and economic impacts. This resource may also aid in the development of more uniform standards for program evaluation within Cooperative Extension.

Volume I of the resource reviews selected study designs. These illustrate different approaches to examining the extent to which clientele behavior or status can be attributed to an Extension program. In order to show the feasibility of using a variety of evaluative study designs in examining program results, Volume II of the resource includes abstracts of 42 studies as examples of these study designs. The abstracts were selected to represent Extension programs in agriculture,

natural resources, community development, 4-H youth, home economics and an overall county Extension program. Each study exemplifies one or more of four basic study designs: (1) survey (ex-post facto), (2) time-series, (3) comparison group and (4) field experiment. These study designs and example studies should in no way limit future evaluation efforts; they are intended to provide State Extension Services with background knowledge for designing studies applicable to their own evaluation interests and needs.

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Awa, Nioku E. and L. Van Crowder, Jr. "Communication Linkages with Lewis County Dairy Farmers," Department of Communication Arts, Cornell University, Ithaca, New York, 1977. 10 pp. (Report) (KAPPA, pp. 7-9)

PROGRAM DESCRIPTION

This study examined the place of the Cooperative Extension among the sources of information utilized by dairy farmers in Lewis County, N.Y. It does not deal with any specific program of Extension, but merely cites the general goal of Extension as "diffusing among the people useful and practical information on subjects relating to agriculture and home economics."

EVALUATION APPROACH/METHOD

This study focuses on examining the role of Extension, along with other sources, in providing information to dairy farmers. The specific study purposes outlined by the authors are identification of the following:

(1) Principal communication channels used by Lewis County dairy farmers

(2) Farmers' perception of Extension credibility

(3) Socioeconomic characteristics of farmers that might have a bearing on their relationship with Extension

To answer the study questions, a random sample of 60 Lewis County dairy farmers was selected from a list of such farmers maintained by County Extension personnel. Data were collected by personal interview using a "semistructured interview form." A copy of the instrument was not included in the report. Fifty-three usable interviews were obtained. The authors report that "in terms of size of operation, number of cows kept, and gross income, the respondents were quite representative of the larger population of north country dairy farmers." Ninety percent of the respondents reported membership in Extension.

Sampled farmers were questioned concerning the sources they used for farming information, and were asked to rate those sources in various ways (most helpful, most trustworthy, and so on). They were also asked specific questions concerning Extension, probing whether Extension or commercial dealers would be more trusted in the case of conflicting information, and asking farmers to rate various techniques by which Extension could communicate with the farmer (printed reports, radio, TV, and personal contact).

FINDINGS

Other Program Related Findings

The study offered interesting insight into farmers' use of various information sources. When asked the "most helpful" and "most trustworthy" sources for information, more farmers cited Extension (41.5 percent and 39.6 percent, respectively) than other possible sources. However, with regard to "most often used for agricultural, scientific,

or technical information" and "most likely to have latest agricultural developments," special interest magazines were most frequently cited (41.5 percent and 49.1 percent, respectively), with Extension being the second most commonly cited source (30.2 percent and 18.9 percent, respectively). "Friends and relatives" were the source rated "most influential when making farm practice decisions (34.0 percent) with Extension and commercial dealers tied for second place (26.4 percent each). If faced with conflicting information, farmers would choose to believe the Extension agent rather than a commercial dealer by a large majority (81.1 percent).

Among techniques used by Extension for communicating agricultural information, printed media were rated most highly.

CONCLUSION

The authors' conclusions concerning Extension's role in providing the farmers with information may be quoted directly:

> "Extension agents are not always the primary nor the most frequently contacted source, but they do seem important as 'information validators.' And, farmers know that they can depend on Extension for timely information about new developments in farming. In general, our findings indicate a tendency for farmers to look to other sources for initial information, with the Extension agent assuming an intermediate role."

Bogenschneider, Karen. "Learning Patterns of Young Mothers in a Rural Wisconsin County," Home Economics Journalism, University of Wisconsin, Madison, Wisconsin, 1977. 184 pp. (Thesis) (KAPPA, pp. 35-37)

PROGRAM DESCRIPTION

Reaching young mothers has long been a concern of Extension educators. Some of the recent research on self-planned learning may provide potential for reaching these "hard to reach" people and may be fundamental to the future of adult education.

The primary purpose of this study was to examine the self-directed learning patterns of young mothers. Self-directed learning is defined as taking the initiative (with or without the help of others) in diagnosing one's learning needs, formulating learning goals, identifying resources for learning, implementing learning strategies, and evaluating learning outcomes. The study was also designed to identify and describe selected factors which influence this information seeking, and to draw implications for adult educators interested in reaching women in this "hard to reach" segment of the life cycle.

EVALUATION APPROACH/METHOD

The study focused on learning as it occurs naturally in the everyday lives of women aged 21 to 28 in Iowa County, Wisconsin. The survey investigated the ways mothers actually learn. All learning projects by which respondents gained knowledge, understanding, or skill about a subject were included, regardless of the quality of the learning.

A probe interview technique was used to help subjects recall their learning projects. A learning project was defined as any deliberate effort to learn which added up to at least one hour in the prior year (Since one purpose of the study was to draw implications for University Extension, it was decided to include learning which could be accomplished within one to several hours, such as how to preserve tomatoes). For example, if a person decides to learn about disciplining a child, she may read a book, attend a class, talk to an intimate friend, and/or read an article in a magazine. Learning resulting from casual conversation, casual television viewing, recreational reading, or observation was not included in this study.

The instrument was specifically designed to seek present learning patterns. Respondents were asked to identify the "most important," "second most important," and "third most important" source of information for each learning project.

Data were obtained from a sample of 78 selected randomly from the total number of women aged 21 to 28 who had borne children within three years prior to the study according to records in the County Register of Deeds Office. Of the county's 19,306 people, all but 5,560 lived in rural areas in 1970.

Interviewers were trained by the author. Of the sample of 78, only four were not interviewed. A letter was written to all potential respondents, followed by a personal interview. The study is based upon self-report data.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

Any subject the respondent reported learning about was included in the study. Types of knowledge gained through learning projects by percent of the 74 young mothers are as follows: 56 percent in occupational (on-the-job) training; 53 percent in personal development (e.g., physical health); 95 percent in family competence (e.g., child development, parenting, and housing design); 43 percent in social responsibility (e.g., "the election"); 78 percent in self-fulfillment (e.g., arts and crafts).

Other Program Related Findings

Four percent of the sample were members of Extension homemakers organizations. Thirty percent of the sample were farm wives, and 40 percent had some formal education beyond high school.

Almost two-thirds of the sources of information cited by respondents for their learning projects were individuals, over two-thirds were nonprofessionals. Another 10 percent were those associated with a business geared toward sales of a product or service. The remainder, a little over 20 percent, were experts, i.e., professionals paid to provide information.

Almost three-fourths of the sources were individuals or groups, while mass media and materials accounted for about one-fourth of the sources.

Seven percent of the total information sources used originated from public agencies. Of the most important specific sources of information cited by respondents, University Extension was mentioned by name as constituting six percent of the group sources (compared with vocational schools constituting 32 percent); one percent of the materials sources (compared with books constituting 69 percent); and less than one-half percent of individual sources (compared with intimate nonexperts constituting 32 percent). Sources of information which had been used by respondents through different mass media channels, e.g., TV and newspapers, were not investigated by the study.

When selecting preferences for learning about home and family subject matter, 36 percent of the mothers indicated interest in joining an Extension homemakers club, followed by 33 percent indicating interest in a couples' club.

CONCLUSIONS

University Extension was not reaching the young mother to any great extent, even though their learning projects were concentrated in home and family areas.

Young mothers are learning, and are relying to a great extent on business and nonprofessional information sources in the home and family area.

Brown, F.L. "Some Significant Woodland Management Practices of Two Selected Small-Woodland Owner Groups in Wayne County, Tennessee."(Masters Thesis) University of Tennessee, 1967. (SMC pp. 81-84)

PROGRAM DESCRIPTION

A series of nine woodland management meetings were held over a 30-month period from 1964-66 to teach basic forest production and management practices to small-woodland owners in Wayne County, Tennessee, in order to facilitate the development of timber resources and improve the potential of forestry as an enterprise in the county. The intended outcomes of this program include: the recognition of value of forest holdings in terms of potential for increased production and income; an increase in knowledge of fundamental woodland management practices for improved timber production; the adoption of recommended woodland management practices, such as control of grazing, thinning of woods, establishing a diameter limit for trees to be cut, marking trees for selective cutting, etc.; participation in Agricultural Stabilization and Conservation (ASC) assistance programs; and the economic development of timber resources to full potential in Wayne County.

Although the author does not specify who was involved in the program delivery, it is indicated that the study is intended to guide the Wayne County Agricultural Extension staff in educating small-woodland owners.

The methods used to publicize the program are not specified; however, sources of timber market information and woodland management advice are ranked. The major sources for both types of information include commercial lumber processors or dealers, Extension Service agents and foresters, and professional foresters.

EVALUATION APPROACH/METHOD

The purposes of the study were to:(1) compare the characteristics of small-woodland owners in Wayne County who had participated in the program with the characteristics of nonparticipants, (2) determine which recommended forestry practices participants and nonparticipants had adopted, and (3) identify some of the factors which had influenced the target clientele to adopt or reject the practices.

The 1966 ASC farm listings were used to obtain the names of 1,030 woodland owners in Wayne County. The study population was limited to 1,000 small-woodland owners having between five and 2,500 acres. This popula-

tion was divided into two comparison groups: the program participants (defined as individuals who had attended at least four of the nine forestry management meetings) and the nonparticipants (those who had not attended any meetings). Out of a total of about 200 meeting attendees, 60 had attended four or more. Of these, 51 were selected for the study sample. The nonparticipant population was also represented by 51 individuals. The study sample was dispersed throughout the county.

Each of the 102 small-woodland owners was personally interviewed by the county agent with a prepared interview schedule. The schedule was prepared at the request of the National Extension Committee on Organization and Policy, and incorporated changes appropriate for Wayne County application.

The schedule was designed to reveal characteristics, production practices, and factors influencing practice adoption of small-woodland owners. Opinions of the interviewer regarding the observed attitudes and interests of the interviewers were also recorded.

The indicators of program impact were provided by the comparison of the forestry management practices of participants and nonparticipants. A numerical rating system was used to classify the management levels (range from 1 for "awareness" to 5 for "use" of practice) of each interviewer on the basis of questions regarding 20 recommended woodland management practices. The average practice diffusion ratings for each group was used to make inferences about the effectiveness of the program in influencing the practices of the participants.

The analysis consisted of tabular array of the data and narrative description. Means were computed in some instances.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

All of the participants and most of the nonparticipants (92%) were aware of the ASC tree planting practice. Nearly all (98%) of the participants and one-third of the nonparticipants were aware of the ASC timber improvement practice.

Practices

Participants tended to have tried the practices while nonparticipants were only "interested" in them.

Participants had a higher average practice diffusion rating than nonparticipants on 19 of the 20 recommended woodland management practices.

The greatest rating differences between participants and nonparticipants were noted for the following practices: (a) participation in non-government forestry program (5.00 versus 1.69); (b) getting advice of professional foresters (4.24 versus 2.10); (c) planting trees to reforest woodland (3.39 versus 1.33): (d) participating in the ASC forestry program (3.69 versus 1.71); (e) starting to harvest within a year after marking (3.14 versus 1.69); (f) marking trees for selective cutting (3.10 versus 1.76); and (g) preparing ground for natural seeding or planting (2.16 versus 0.84).

Forty-three percent of the participants and 40 percent of the nonparticipants had used the ASC tree planting practice; however, only 16 percent of the participants and none of the nonparticipants were using the ASC timber improvement practice.

Other Program Related Findings

Eighty-two percent of the participants and 25 percent of the nonparticipants mentioned the Extension Service as a source for timber production cost information.

The Extension Service (county agent and Extension forester) was mentioned by 12 percent of all the interviewees as a source of timber market information. Sawmill operators, lumber dealers, papermill company representatives, and timber buyers were cited by larger percentages of the interviewees as information sources (42 percent, 38 percent, 18 percent and 13 percent, respectively).

CONCLUSIONS

The author infers that the meetings and demonstrations in Wayne County tended to attract potential adopters and/or innovators, due to the finding that the participants in the sample tended to be more innovative and have characteristics similar to the innovators of other studies.

Dardeau, J.L. "Factors Associated with Adoption of Recommended Rice Fertilization Practices by Rice Farmers of Vermilion Parish, Louisiana," 1971. Master's Thesis, Louisiana State University, 1971. (SMC pp. 52-53)

PROGRAM DESCRIPTION

The differences between the rice farmers in Vermilion Parish that practice proper timing of fertilizer to rice and those that do not are examined in terms of personal and social characteristics, their attitudes, and participation in educational activities conducted by the Extension Service and the Experiment Station. Extension activities include parish rice meetings, field days, newspaper articles prepared by Extension, Extension circular letters, Extension farm visits, and general contact with the county agent.

EVALUATION APPROACH/METHOD

The total population was the 1,213 rice producers of Vermilion Parish found on the Agricultural Stabilization and Conservation Service list of rice producers. A modified random sample of 100 rice farmers was obtained by selecting every 12th name from the list. Each producer was personally interviewed using a prepared schedule. Data were collected on personal and farm characteristics, their sources of information, participation in Extension and Experiment Station educational activities, use of certain recommended practices (including the use of preplant fertilizer applications, and topdressing with nitrogen at the first joint), and the diffusion information on recommended fertilization practices. The author collected the data with the help of the county agent.

Data were coded and processed by computer and tested using Chi-square to determine significant associations between various independent variables and the use of recommended practices.

FINDINGS

Other Program Related Findings

There were found to be significant associations between the adoption of recommended practices and higher levels of education (ninth grade or more), larger farms (over 400 acres), and larger acreages of rice (over 200 acres).

A positive association was found between adoption and membership in the Farm Bureau (.02 of probability), The Farmer's Cooperative (.01 level), and the Rice Growers' Association (.01 level).

Farmers who heard of practices from Extension-Research were more likely to be adopters for all four practices (preplant application, application before or at permanent flood, top-dressing with nitrogen at first joint, and timing of fertilizer application).

Attendance at Parish Extension rice meetings and at Experiment Station field days was found to be positively and significantly associated with the adoption of practices at the .01 level.

Adoption was significantly associated with the reading of newspaper articles by Extension agents and of circular letters sent by Extension agents.

Fifty-four percent of the adopters were visited by Extension agents at least once during the past three years to discuss rice fertilization, as compared to 7 percent of the nonadopters; in addition, 78 percent adopters had spoken to the Extension agent by telephone or office visits at least once in the past three years, while only 22 percent of the non-adopters had done so. There is thus a significant association between adoption and both farm visits and other personal contact with the Extension agent.

CONCLUSIONS

Farmers who receive their information from Cooperative Extension and research personnel are more likely to adopt recommended practices.

Forest, Laverne. "Shawano County Leaders: An Evaluation of University of Wisconsin Extension Land Use Planning Education," University of Wisconsin--Extension, Madison, Wisconsin, 1977b. 15 pp. (Report) (KAPPA pp. 84-86)

PROGRAM DESCRIPTION

The overall Extension program in Shawano County, Wisconsin, draws upon the 13 program areas of the total University of Wisconsin system, with the major emphasis on Cooperative Extension programs in: (1) agriculture,dairy and livestock, crops and soils, forestry, farm management, building and equipment, horticulture, and conservation; (2) home economics -- family living, housing, interpersonal relations, consumer resource management, food and nutrition, crafts and cultural arts, Extension Homemaker Clubs and 4-H projects, Expanded Food and Nutrition Education (EFNEP); (3) 4-H and youth-citizenship, recreation, leadership development in more than 50 project areas; (4) community resource development -- leadership, business and industry, environmental resources, recreation, governmental process, land use planning and housing; (5) continuing education for professionals -- the arts, business, education, social work, public affairs, law, government and community development, health, agriculture, women's and family living, and communications. Programs were delivered to county residents under the direction of the University of Wisconsin Extension Service, and through the services of the five Extension agents based in Shawano.

EVALUATION APPROACH/METHOD

The stated purpose of the study was to determine the "perceptions" of Shawano County leaders toward activities and benefits resulting from Extension Service land-use planning programs. Sub-questions addressed to the community leaders surveyed included: (1) How and to what extent have leaders been involved in land-use planning activities? (2) What are their perceptions of Extension Service input? (3) What are the current attitudes and commitments to the program? and (4) What are the perceived benefits derived from the program? The study design comprised a simple survey conducted via telephone interview questionnaire of 238 county leaders. The composition of the survey sample was as follows: 167 appointed or elected officials; 45 "influential" leaders, so perceived by county residents; 26 persons who both held official positions and were perceived as "influential." Selection criteria are not otherwise reported.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

All findings were self-reported perceptions of community leaders. Of the leaders contacted, 65 percent reported that they had "positive" attitudes toward land-use planning measured by agreement -- disagreement with nine items on an attitude survey. They also answered that the educational activities of the Extension Service had been the "primary cause" of these attitudes. Leaders involved in the program reported that they had become "more knowledgeable and committed" to land-use planning due to Extension efforts.

Practices

Of the community leaders contacted, 75 percent reported "involvement" in land-use planning due to Extension Service programs. In the Shawano Lake area, the community resource development agent had been instrumental in obtaining a grant of $13.5 million to improve sanitation facilities. The study found that the leaders interviewed were continuing to work toward and were receiving more local support for county-wide comprehensive planning.

End Results

The study found that the leaders questioned reported a range of perceived benefits to the county from the land-use planning, with "environmental" and "health and safety" improvements predominating. The study also reported perceived economic and educational "benefits" to the county from the land-use planning, but noted that "no actual measurement of benefits have been obtained." The program goal was to gain community support for and participation in land-use planning. Survey data indicated that 60 percent of all leaders in Shawano County were eventually involved, with most of them (87 percent) continuing their involvement for several years.

CONCLUSIONS

On the basis of the findings listed above, the study concluded that "this Extension education program is an example of how an intense, focused effort over time can bring about significant changes in a community when Extension cooperates with other groups."

Forest, Laverne B., George Brotz, Carol Diggelman. "Environmental Education for Decision Makers: An Evaluation of a Pilot Program," University of Wisconsin - Extension, Madison, Wisconsin, 1976. 96 pp. (Report) (KAPPA pp. 81-82)

PROGRAM DESCRIPTION

A three-year special-funds pilot project entitled the Environmental Resources Center (ERC) was set up by the Extension Service of the University of Wisconsin in close cooperation with the Committee on Environment, Economic, and Extension Education of the Milwaukee County Board of Supervisors. The purpose of the program was: (1) to assemble and disseminate information on environmental problems (to decision makers); (2) to develop and test skills and techniques for involving Extension Service personnel in the community decision-making process; and (3) to change attitudes and practices relating to the environment. Three staff members (a technician, an educator, and a clerical employee) worked with the County Board of Supervisors and a variety of community decision-makers in environmental groups, business, industry, government, and education in Milwaukee County, Wisconsin. The program staff conducted workshops and meetings, published a newsletter, acted as a clearing house for shoreline erosion problems, lectured in the county schools, served on committees and task forces, and assisted individuals and municipal groups. It also drafted resolutions and reports for the County Board of Supervisors.

EVALUATION APPROACH/METHOD

The authors state that the objectives of the study were to evaluate: (1) the extent of the Environmental Resources Center's impact on and success in Milwaukee County, (2) the extent to which the program met its objectives, and (3) the appropriateness of the original proposal. With these objectives in mind, the authors caution, however, that since this was a pilot program, much of the study was designed "to learn what had happened -- not to prove or disprove success or failure." Three general approaches were included in the study design: a survey (for scope), in-depth problem analysis (for focus), and interviews with key people (for perspective and clarification). The instruments used for data collection included telephone interviews with a survey questionnaire to program participants, a criteria questionnaire mailed to key program leaders, and personal interviews with key community leaders. In addition, questionnaires were sent to the air pollution task force and participants at the in-service workshops for school teachers. The telephone questionnaire survey was addressed to a stratified random sample of the 896 program contacts; 144 (of 156 selected) interviews were completed. The criteria questionnaire was sent to 36 persons of the program staff, Extension program leaders, highly involved program participants, government officials, and resource persons, and resulted in a return of 29 (80.8 percent) questionnaires.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

From the telephone survey it was found that of 115 who received the newsletter, 73.9 percent reported it "increased understanding of environment issues, and 13.9 percent reported they had learned useful technical information from it." It was also found that of those who had participated in the workshops (n=40), 77.5 percent reported "increased understanding" and 44.2 percent reported learning useful technical information.

Practices

The various strata of the telephone survey reported that 64.3 percent to 80.8 percent "used the information" received from the program, while 76.9 percent to 81.7 percent "shared information," and 46.1 percent to 63.5 percent "tried to influence others" as a result of the program information. The program prompted the County Board of Supervisors to pass resolutions on shoreline erosion.

End Results

Any available evidence on amounts of money potentially saved by Milwaukee County appeared "inconclusive." For other environmental problems addressed by the program, the study finds that it was probably "too early to tell if ERC information" would have an eventual impact on Milwaukee County.

Other Program Related Findings

The study found that the "level of satisfaction" with the program as a whole was high among "many people," but the authors were concerned that it "should have been higher with key groups like local and county government officials."

CONCLUSIONS

The authors conclude that understanding on specific issues due to program intervention was "fair to good."

Concerning the ability of the program to influence decision-makers, the authors concluded that although major and long-lasting policy changes take time, "ERC proved that an educational system can work closely with a political system."

Forest, Laverne B., and Mary G. Marshall. "Impact of Extension in Shawano County: Conclusions and Implications," Division of Program and Staff Development, University of Wisconsin -- Extension, Madison, Wisconsin, 1977. 44 pp. (Report) (KAPPA pp. 227-229)

PROGRAM DESCRIPTION

The overall extension program in Shawano County, Wisconsin, draws upon the 13 program areas of the total University of Wisconsin system, but the major emphasis has been on Cooperative Extension programs in: (1) agriculture -- dairy and livestock, crops and soils, forestry, farm management, building and equipment, horticulture, and conservation; (2) home economics -- family living, housing, interpersonal relations, consumer resource management, food and nutrition, crafts and cultural arts, Extension homemaker clubs and 4-H projects, Expanded Food and Nutrition Education (EFNEP); (3) 4-H and youth -- citizenship, recreation, leadership development in more than 50 project areas; (4) community resource development -- leadership, business and industry, environmental resources, recreation, governmental process, land-use planning, and housing; (5) continuing education for professionals -- the arts, business, education, social work, public affairs, law, government and community development, health, agriculture, women's and family living, and communications. Programs are delivered to county residents under the direction of the University of Wisconsin Extension Service, and through the services of the five Extension agents based in Shawano.

EVALUATION APPROACH/METHOD

The purposes of the study were: (1) to increase understanding both among Extension personnel and external influentials of how various program areas fit together in their overall use by a total county population; (2) to determine the overall results of Extension efforts in a county; (3) to increase understanding of how evidence can be secured, communicated, and used effectively in such an overall evaluation.

The evaluation was conducted through review of program inventories and telephone surveys; the surveys were conducted by trained University of Wisconsin Survey Research Laboratory interviewers. Program inventories were prepared giving a record of programs conducted, subjects presented, and approximate attendance, providing an overview of agriculture, 4-H, home economics, resource development and other areas. In the leader survey, 238 county and community leaders were interviewed. A random sample of 1,192 adult residents made up the total county survey, and respondents feeling they had "some" or "a lot" of contact with Extension ("considerable contact" respondents, n=174) were asked further questions, according to one of two interview schedules. In addition, a sample of high contact respondents were identified by Extension personnel. A complete description of all aspects of study methodology and samples of survey instruments are available, and some of the included information is from these supplementary sources.

FINDINGS

End Results

Considerable contact respondents (n=174) reported they received benefits from Extension in such areas as: home, health and safety (29 percent "very much" benefit, 42 percent "some benefit"); natural environment (27 percent "very much" benefit, 39 percent "some benefit").

Both men and women felt they and their families received home, health, and safety benefits. Both lower-income and higher-income persons with considerable Extension contact perceived economic benefits from Extension. Thirty eight percent of those with less than $8,000 total annual family income perceived "very much" economic benefit, and 37 percent perceived "some" economic benefit from Extension.

County and community leaders felt Extension's traditional audiences received more overall benefits than did other audiences. For example, over 50 percent of the leaders felt that youth and farmers received a "great deal of help" from Extension, while 24 percent felt that city-village residents receive a "great deal of help." Forty-seven percent of leaders perceived a "great deal of benefit" to the natural environment as a result of Extension work, 38 percent perceived a "great deal of benefit" in health and safety; and 34 percent perceived a "great deal of benefit" in economic improvement.

Other Program Related Findings

Some form of contact with Extension over the 15-year period, 1960 - 1975, was reported by 76 percent of the general county sample; 15 percent reported "some" or "a lot of" contact. Of the community and county leaders, only 7 percent reported no contact; 48 percent had a great deal of perceived contact. More people in the sample reported being reached by mass media than by other techniques. Twenty-nine percent had contact only through mass media.

Respondents had received many kinds of information from Extension: most frequently mentioned by those having considerable contact (n=174) were the areas of home and family life (60 percent), insect and weed problems (55 percent), land use and zoning (55 percent), nutrition and better eating (53 percent), and gardens, lawns, and flowers (51 percent).

Most leaders and "considerable contact" respondents thought Extension did a good or excellent job. They rated Extension as "good" or "excellent" on the following criteria: deals with important issues (77 percent), effective (71 percent), efficient (68 percent), and worth the tax dollars (63 percent).

CONCULSIONS

Relative to the findings reported above, the following conclusions were drawn: (1) most adults in Shawano County have contact with Extension; (2) individuals, groups and communities all benefit from Extension; and (3) citizens and leaders make positive judgments about Extension.

Frye, Ellen and D. R. Miller. "Evaluation of the Connecticut Cooperative Extension Service Natural Resources Education Program for Community Land Use Decision Makers," Cooperative Extension Service, College of Agricultural and Natural Resources, The University of Connecticut, Storrs, Connecticut, c. 1976. 61 pp. and appendix. (Report) (KAPPA pp. 91-93)

PROGRAM DESCRIPTION

This program comprised a series of four workshops (1973-1975) on the "Use of Natural Resource Information in Local Land Use Decisions." The workshops were offered to all 169 towns (townships) in Connecticut as a combined effort of the Connecticut Cooperative Extension Service and the Natural Resources Data Center of the Connecticut Department of Environmental Protection, with additional assistance from the local U.S. Soil Conservation District and Regional Planning Agency.

The purpose of the program was to train local government officials to develop, understand, and utilize their natural resource information in order to make more intelligent decisions concerning land-use management. The workshops provided sessions on how to catalog, interpret, and utilize land-use data, and how to identify characteristics suitable for land uses such as sanitary landfill, on-site septic tank effluent disposal, transportation, and public utility corridors. Workshops were actually presented to officials in 115 towns in which about 400 town officials participated, including members of inland wetlands, conservation, planning and zoning, town planning and sanitation commissions. Five series of workshops were conducted (20 meetings), each by two discussion leaders.

EVALUATION APPROACH/METHOD

The purpose of the study was to discover whether or not the program objectives had been met by addressing four specific questions: (1) What is the value of the program as basic education? (2) Are program materials and concepts being used? (3) Should the program be followed by future "in-depth" programs? and (4) What document resources were used to carry out the program?

The study was designed as a quantitative-descriptive survey made up of three components. First, telephone interview questionnaires were completed with 122 participants selected by cluster random sampling from the approximately 400 persons who had attended the workshops between 1973 and the spring of 1975. These were planning and zoning commissioners, engineers, and other technicians. At least one person was interviewed from each of the 115 towns in which workshops had been presented. Second, mail questionnaires were sent to Extension community resource agents, U.S. Soil Conservation Service District conservationists, and other professionals who coordinated the program. Third, the previous five years of planning, zoning, and conservation records were reviewed in a total of 28 towns, 19 of which participated in the program, and nine of which (the comparison group) had not been represented at the workshops. The towns evaluated were selected randomly according to socioeconomic and population density criteria.

FINDINGS

KASA (Knowledge, attitudes, skills, aspirations)

Of the workshop attendee returns, 71 percent reported that the knowledge gained from the workshops contributed to the level of natural resource awareness in their towns. This was supported by examples such as "had no prior knowledge of the subject" and "gained ability to explain maps and soils to other commissioners." The questionnaires returned by professionals indicated that the program learning of the participants had contributed to decision-making processes in their commission or office.

Practices

The study found that 71 percent of the workshop participant returns reported increased land-use activity since attending the workshop--for example, wetland activities and new town plans. Of the 26 percent reporting "about the same" activity, most were already highly involved in land-use activity before the workshops began. Participant returns indicated that 87 percent had used program data for activities in their towns.

Questionnaires returned from professionals reported difficulty in attempting to implement workshop recommendations; the professionals found that use of workshop information was not obvious. They felt some officials used the resources but others needed assistance to be able to implement recommendations.

From the town record reviews, the study found that although some towns not represented at the workshops already had good land-use programs, the towns which were represented ranked higher in use of natural resource information generally; 30 percent demonstrated "high" workshop influence and another 30 percent displayed "some" influence. Examples of high influence were the development of a detailed system for evaluating land-use decisions based on natural resources and the development of single-factor overlay maps to update town plans. Examples of low influence situations can be found in towns that had no in-house staff and relied upon district conservationists' recommendations on land-use decisions. No results or impact from application were reported. The study notes that land-use changes take time.

Other Program Related Findings

Of the workshop participants, 82 percent reported that knowledge gained from the workshops had been shared with others, and 91 percent reported that they would be better able to assimilate new information in the future.

CONCLUSIONS

The study concluded that workshop materials and concepts had been utilized in the towns to some extent, but not as much as originally expected. Maximum use of the workshop information was accomplished by members of conservation and inland wetlands commissions, who said that they used the information in decision making, and by town in-house professional staffs.

Goetting, Marsha A., "Evaluating an Estate Planning Study-at-Home Course," Cooperative Extension Service, Montana State University, Bozeman, Montana. 1982. 12 pp. (Report) (PDEMS)

PROGRAM DESCRIPTION

The goal of the course is to acquaint participants with problems of and tools available for estate planning so that they can recognize the need for it and take appropriate actions. High fuel costs, vast distances, and unpredictable winter weather in Montana were reasons for developing the study-at-home course rather than relying upon public meetings.

The course was reviewed for legal accuracy by various members and agencies of the legal community. The State Bar provided funding to help defray publication costs and assisted along with state associations of accountants, bankers, and life insurance companies in helping Montana residents become aware of their opportunity to participate in the course. Other publicity approaches included a weekly TV show, radio releases, and newspaper articles. Participation in the course was free.

The ten-lesson course was prepared by the Montana Cooperative Extension Service and included topics such as life insurance, wills, taxes, gifts, and trusts.

The study-at-home educational delivery method was supplemented by public follow-up meetings on estate planning held in 22 counties with an attendance of over 1,000 residents. By the end of 1980, the first year of the program, over 12,000 Montanans had participated by receiving mailed lessons. The evaluation covers the program within the first year of its operation. By the summer of 1982 participation in the program had totaled over 21,000.

EVALUATION APPROACH/METHOD

Unexpectedly large numbers of participants across the state created a deficit in Extension printing and mailing budgets. Concerned legislators, administrators and Extension program staff asked whether separate mailings of the lessons of the course were necessary, and whether lessons were read and acted upon by course enrollees.

The majority of the counties in Montana had completed mailing the lessons to about 11,000 recipients by the end of May 1980.

Questionnaires were sent to a sample of 400 participants in September 1980. A random proportional stratification method was utilized. The number of program participants in each county was divided by the number of sample participants appropriate to that county. For example, Cascade County had 1,350 participants, i.e., 11.6% of the total of state enrollment. Then 1,350/11.6x400 provided the selection interval for sampling from the Cascade County mailing list.

The instrument was five pages in length and consisted of 36 questions. The cover letter assured confidentiality for only the last nine (socioeconomic) questions in the questionnaire.

Across the State, a total of 206 survey forms were returned for a response rate of about 52%. Response rate from the 49 county offices ranged from 0% to 100%.

FINDINGS

KASA (Knowledge, attitudes, skills, aspirations)

A majority of the respondents became more aware of the serious consequences of not having an estate plan. For example, 68 percent discovered that Montana law would not distribute property according to their wishes in the event that they died without a written will.

Examples of aspiration change include the findings that: based on the lesson on trusts, 14% indicated their intent to form a trust while more than 60% decided that they did not want to form a trust. Intent to contact professionals varied from three percent intending to contact a trust officer to 42% an attorney.

The lesson on taxes helped 31% of the respondents to develop the skill of computing Federal estate taxes and 23% the skill of estimating Montana inheritance tax.

Practices

Examples of practice change include: eight percent of respondents indicated that they had written a will and 13% of those with existing wills updated them. Percentages having contacted various professionals during or after completing the course are as follows -- accountant (8%); attorney (22%); banker (3%); insurance agent (8%); investment counselor (4%); and trust officer (3%).

Other Program Related Findings

The majority of the respondents (67%) were female, and 84% were married. Participant ages varied from 18 through 60 and over, with over one-third living on farms or ranches and over one-third in cities. Responses were provided to a question asking estimated estate after subtracting debts and total family income.

Few respondents reported not reading the lessons. Over 60 percent of respondents felt the best way to learn about estate planning is a combination of home course and public meetings, while only three percent felt a public meeting alone is the best way to learn. A majority of respondents (64%) felt that the best way to receive the lessons was once a week.

Sixty-eight percent of respondents discussed estate planning objectives with their spouse or other family member.

CONCLUSIONS

A study-at-home course can be an effective Extension method to help participants recognize the need for estate planning in their situation. The course seemed to influence many to review their situations, to plan estates and modify their existing plans.

Glass, Patsy L. and Betty R. Reese. "Evaluation of the 'You Can Do It' Letter Study Series for the Jackson Area of the Ohio Cooperative Extension Service," Cooperative Extension Service, Ohio State University, Columbus, Ohio, 1976. 34 pp. plus appendix (Report) (KAPPA pp. 49-50)

PROGRAM DESCRIPTION

The program, "You Can Do It," consists of teaching home repair and maintenance tasks in the areas of electrical and plumbing repairs, painting, and weatherizing homes. The goal of the program is to provide information that would effectively increase knowledge and skills of limited and moderate income families about care and maintenance of their homes. The program delivery was through three modes. The "You Can Do It" TV series developed by the Texas Agricultural Extension Service was shown on local stations. At the same time, participants received the letter study series paralleling the TV presentation, and further explanatory notes from the area home economics extension specialists. The program was directed to limited and moderate income families in nine southeastern Ohio counties.

EVALUATION APPROACH/METHOD

The purpose of the evaluation was to determine which of the recommended repairs participants had performed both before and after the program, and to obtain estimates of money saved by doing these repairs. The evaluation was a survey of participants. Approximately two weeks after the TV series was completed, questionnaires were sent to all registered participants: those who had requested the letter study series to go along with the TV series. To assure that they had in fact been exposed to the program, participants were asked if they had received the nine-part letter series and whether they had viewed the TV demonstrations. Participants were asked whether they had performed each of the recommended tasks and whether this occurred before or after exposure to the program. A total of 1,100 questionnaires were sent to registered participants. The return rate was 24.2 percent or 231 questionnaires; there was no control group.

FINDINGS

Practices

The two areas in which participants indicated they had performed more activities after receiving the "You Can Do It" series were in making (n=63) and using (n=27) low-cost cleaning products and in rearrangement of storage space (n=74). More respondents reported they had done interior painting (n=115) and electrical repairs (n=103) before taking the classes.

End Results

One hundred tasks were reported completed by the 231 respondents for a total estimated savings of $2,511.71. Most dollars saved were through exterior and interior painting tasks, but the greatest number of participants saved by doing their own plumbing tasks.

Other Program Related Findings

The percentage reporting viewing the TV series was low, indicating a less than optimal exposure to the program.

The information contained in the letters and fact sheets was quite well received, appreciated, and very helpful. Persons who received this information used it, and everyone who responded plans to keep the materials for future reference.

CONCLUSIONS

The television programs were not as important an aspect of the total "You Can Do It" series as were the letters and fact sheets. The most helpful information was on the subject of plumbing. The greatest amounts of money saved were from the painting lessons. The most frequently used materials were the lessons on storage and cleaning products.

Kanarek, Linda. "Results of a One Year Follow-Up Evaluation of the Consumer Casebook Series," Cooperative Extension Service, University of Connecticut, Storrs, Connecticut, 1978. 6 pp. (Report) (KAPPA pp. 51-53)

PROGRAM DESCRIPTION

A Consumer Casebook Series prepared by the Cooperative Extension Service of the University of Connecticut, was presented as a five-part television program and supported by a five-lesson correspondence course made available to 800 residents. The purpose of the program was to give participants information about specific practices to enhance their capability as consumers. Content areas included procedures concerning the checking of warranties, car repairs, contact with consumer agencies, credit rating, and reaction to misleading advertising.

EVALUATION APPROACH/METHOD

The purpose of this evaluation was to determine if the participants had actually used the information during the year which had elapsed since the course ended and since the initial assessments were made. The 11 questions were intended to gain specific knowledge about the content areas most used, ancillary uses of information provided in the lessons, and suggestions as to how the structure of the course could be improved. Many of the questions had a choice of three responses (yes, no, not needed, i.e., "Have you asked for a written estimate before having your car repaired?"), while others had a yes-no format, depending on need (i.e., "Have you come in contact with any misleading advertising? If yes, what did you do?"). Information was also obtained concerning the degree of participation in the program, i.e., reading:none, some, or all of the information; and, viewing:none, some, or all of the television programs. Demographic information such as sex, education, and occupation was also obtained. One hundred people were randomly selected from all participants; 90 were reached and interviewed for the survey.

FINDINGS

Practices

One year after the program, 95 percent of the respondents reported using the information, an increase of 26 percent over the original survey conducted at the end of series. Of the five different content areas covered by the lessons, 21 percent of the respondents had used one; 28 percent, two; 31 percent, three; 14 percent, four; and 1 percent all five. Respondents used the information concerning the checking of warranties most (88 percent); the second most used lesson pertained to asking for a written estimate for car repairs (53 percent). Thirty percent of the respondents had contacted one or more consumer agencies, most often the Better Business Bureau and/or the Bureau of Consumer Protection.

Other Program Related Findings

The evaluation showed that 50 percent of respondents gained information about a business before dealing with the company, 36 percent came in contact with misleading advertising; and, only seven percent had checked their credit rating, presumably because most of them, 83 percent, had no problem in this area.

Of the 90 respondents, 82 percent had either a high school degree, some college, or a college degree. Thirty percent were homemakers, 11 percent teachers, 11 percent retired, and 47 percent were considered as "other professionals." Twenty five were male, 65 female.

Most respondents conveyed the feeling that the program was "very well put together" and enjoyable, had no suggestion for improvement, learned a great deal from it, and would not hesitate to take another program such as this offered by the Extension Service.

CONCLUSIONS

The lesson areas about warranties and car repair were the most applicable in participants' daily lives. Other information from the lessons was used as needed.

Rockwell, Kay S., Roy F. Stohler and Louise E. Rudman "4-H's Influence on Advanced Training, Careers and Leadership Roles in Adulthood." Cooperative Extension Service, University of Nebraska - Lincoln, Lincoln, Nebraska. 1982. 100 pp. (Report). (PDEMS)

PROGRAM DESCRIPTION

Goals of the Nebraska 4-H program have included: learning to respect, communicate with, and get along with people; developing an inquiring mind and a feeling of self-worth; understanding and practicing family living skills; learning citizenship; and learning resource management and problem solving. Over the past several years, the Nebraska 4-H program has included the components: (a) career education (including economics, jobs and careers), and (b) education in leadership, citizenship and community development through various curricula and educational delivery methods.

These two components of the 4-H program in a 13-county area in northeast Nebraska are the focus of this study. Relevant projects in these two components have included community awareness, and methods have included judging and participating in demonstrations, committees, and special career days, as well as junior leadership and camp counseling.

EVALUATION APPROACH/METHOD

Purpose of the study was to explore whether adults, ages 25-36, feel their earlier 4-H experiences (a) contributed to their selection of advanced education and/or career, and (b) affected their leadership in occupational or community activities.

The 13 counties of northeast Nebraska were divided into counties having small, medium and large 4-H enrollments as of 1978. Two counties were randomly selected from each size category. A list of names of individuals who had been 4-H members in these selected counties, and who were born between 1944 and 1954, was identified. Individuals from this list were eligible for the study if they had been enrolled in 4-H for two years or longer. Television members or special interest members were not eligible to be included in the study.

From the total number of 4-H alumni thus eligible for the study, 10 percent in each county were randomly selected for the sample. If an address could not be located after checking with two sources of information, an alternate name from the list was randomly selected for substitution.

The questionnaire asked respondents about such topics as their 4-H membership, individual characteristics, education and occupation, the influence of 4-H on adult roles, and perceived benefits received from 4-H.

Questionnaires were mailed to 499 individuals with a completion rate of 65.2%. Rates of return were higher from individuals who had been 4-H members for a relatively long time (four years or longer). Over two-thirds of respondents had been 4-H members for four years or longer; over 80 percent had had formal education beyond high school. The mode of analysis was to correlate frequency distributions of the various types of data from the survey.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

Respondents were likely to feel that they had benefited from 4-H by learning skills such as sewing, cooking, and feeding livestock (79%), but less likely to feel that 4-H had helped in: "learning about record keeping" (43%); "raising a family" (27%); "making better use of time" (25%); "planning toward an occupation" (18%) and, "speaking in public meetings" (18%). Individuals with longer memberships in 4-H were more likely to indicate that they had received the above benefits.

About 44 percent of respondents indicated that 4-H activities had influenced their choice of an area of study in higher education. Over 50 percent of respondents said that 4-H activities had influenced their choice of potential career, and 40 percent said that 4-H had influenced their choice of first occupation. Those respondents who had been 4-H members for a longer time were more likely to say that 4-H had influenced their choice of area of study.

For adult community and occupational leadership roles such as conducting business meetings and speaking before groups, the percentage of respondents indicating 4-H had been helpful in preparing them for these roles was: "extremely helpful" - about 10%; "very helpful" - 30-37%; "helpful" - about 50% and "not helpful" - about 7%. Those who had been members six or more years were likely to rate 4-H as extremely or very helpful in these roles.

Practices

Individuals who listed their current occupation as in the medical field were more likely to have participated in 4-H health and safety projects than individuals in other types of occupations. Among males, those in the farming occupation were more likely to have taken 4-H agricultural projects than those in other occupations.

End Results

Respondents were likely to feel that 4-H had "taught them responsibility" (68%) and given them self-confidence (56%). Individuals with longer memberships in 4-H were more likely to report the above benefits.

Other Program Related Findings

Three quarters of the respondents lived on a farm or ranch during their 4-H membership years and only one-fourth have continued to live on a farm or ranch as adults. Reasons respondents mentioned most frequently for joining 4-H were that their friends were members and they were interested in 4-H projects.

CONCLUSIONS

Overall, it appears that 4-H programs, activities, leaders, and agents have definitely influenced 4-H members' choices of careers, higher education and occupations. These impacts increase with length of 4-H membership. Four-H programs have also helped to prepare participants for adult leadership roles. Being a 4-H member for a longer time provides more help for many of the adulthood roles. The report recommends that 4-H expand skill development, career exploration opportunities, and continue leadership activities including a state 4-H conference.

Steele, Sara M., and Norman Everson. "What Youth Gain from 4-H Animal Projects," 4-H Youth Development and Program and Staff Development, University of Wisconsin -- Extension, 1978. 66 pp. plus attachments (Report) (KAPPA pp. 141-43)

PROGRAM DESCRIPTION

The goals of the 4-H Animal Science projects, which involved 37,912 boys and girls in the state of Wisconsin, are designed in terms of the general 4-H goals, "to help youth acquire life skills." Each year individual participants are enrolled in a project relating to the care, raising, grooming, and breeding of one or more kinds of animals under the guidance of a local volunteer project leader who is trained and counseled by county Extension 4-H and agricultural agents, with assistance from statewide specialists of the Cooperative Extension Service of the University of Wisconsin. The Extension Service also: provides literature on animal husbandry, and ideas and outlines for local meetings and activities; organizes leadership committees; and plans and sponsors fairs, shows, and judging contests at the community, county, and state level. In 1977, dairy projects were the most popular with almost 10,000 members; horse and rabbit projects followed.

EVALUATION APPROACH/METHOD

The reported objectives of the statewide evaluation study were to obtain quantitative data on "perceived impact and results" of 4-H participation in animal science projects in order to test this program against the general goals of 4-H. To obtain this data, a survey was designed to collect data on the following research topics: (1) learning specific to animal science projects, (2) learning from 4-H experiences, (3) activities related to the project, and (4) the use of Extension Service information provided to project enrollees.

The survey was conducted by means of telephone interviews with project members 13 years of age or older ("older members"), and with parents of members under 13 ("younger members"). From the 12,741 animal science enrollees in the University of Wisconsin computer in 1977 (about 45 percent of all Wisconsin animal science enrollees), a simple random computer sample was selected resulting in a total sample of 341 program participants. Of 221 older members in the sample, interviews were completed for 150 (68 percent); of the 120 younger sample members, interviews with their parents were completed for 87 (73 percent). Comparisons of the sample with the sample framework are tabulated for characteristics such as age, sex, type of animal project, and length of participation in 4-H.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

The self-report survey returns indicated that information received from various Extension related sources such as local, county, or state meetings, 4-H literature, county Extension agents, or project leaders was

rated "a lot" or "quite a bit" of help by 82 percent to 97 percent of the respondents. From the individual projects themselves, 97 percent of the older members reported they had "learned useful knowledge" as compared with 95 percent of the younger members (as reported by their parents). Learning of "useful knowledge" was tabulated for 12 project-specific categories including grooming, training, patience with the animal, controlling diseases and pests, and breeding.

End Results

The survey asked a number of questions relating to 4-H contribution to "life skills," and found that program participation fostered "getting along better with other youngsters," "a sense of values and goals," being "a good citizen," having a better "understanding and value of him/herself," "being a better family member," using "good health and safety practices," "defining and solving problems," etc.

Other Program Related Findings

Most parents and youth think "4-H is great!"

The survey found that 88 percent of the older members and 89 percent of the younger members responding had completed an animal project in 1977, that 87 percent of the older members and 82 percent of the younger members had exhibited an animal, and that 47 percent of the older members and 30 percent of the younger members had given a demonstration or talk about their individual projects.

A computer summary found that 28 percent of the animal science projects were carried out by children under 12 years of age, 29 percent by children 12 and 13 years of age, and 43 percent by members 14 and older.

CONCLUSIONS

The authors concluded that since 4-H literature and project-related activities are recognized as "highly rated" sources of information, and both parents and youth recognized substantial learning from the animal science project, this learning made an "important contribution" to developing "life skills." The 4-H animal science project is thus "reaching its objectives," and these objectives are "valued by youth and parents."

Summers, James C. and Frederick A. Zeller. "Urban 4-H in West Virginia: A Longitudinal Evaluation," Center for Extension and Continuing Education, West Virginia University, Morgantown, West Virginia, 1977. 231 pp. (Report) (KAPPA pp. 144-147)

PROGRAM DESCRIPTION

The Urban 4-H Program focused on youth primarily from low-income, inner-city families in selected sites within the cities of Charleston and Huntington, West Virginia. The program was the result of an expanded budget allocation to West Virginia Extension of about $104,000 for new youth programs; about $68,000 was allocated for urban areas. The following objectives of this program were similar to most youth programs: (1) to develop a realistic, positive self-concept, (2) to increase social adjustment skills, (3) to develop an awareness in career exploration appropriate for the social maturity level of the individual, (4) to increase skills that contribute to job satisfaction, and (5) to develop leadership.

The initial target population of the program in the selected sites was youth between nine and 12 years of age, with some flexibility on either side to accommodate interested brothers, sisters, and friends. The report did not describe the activities and delivery staff for the program but seemed to imply that it was not atypical of most 4-H programs. The unique aspect of this program, according to the authors, was that it employed new methods of planning and development involving the entire state 4-H staff, other Extension staff, youth, parents, community and agency people, and the evaluation staff; and that the entire process was observed, documented, and evaluated by the evaluation staff.

EVALUATION APPROACH/METHOD

The report stated that the research and evaluation strategy was divided into three separate phases:

(1) An examination of factors relating to the continuous overall program planning process;

(2) The organizational impact of the program, which would examine the processes and dynamics of integrating the urban program into the regular programming process; and,

(3) An examination of the impact of the program on the client group including youth, adults, local groups, and organizations.

The remainder of this abstract is concerned only with phase three which took two purposes and forms. The purpose was to determine whether or not the program was enrolling youth typical of the population rather than attracting only certain types. A sample survey of program participants and nonparticipants was conducted to ascertain characteristics such as age, sex, family composition, race, income, intelligence quotient, and school attendance. The study was longitudinal -- 1973-74 and 1974-75 -- in order to determine whether or not certain types of youth dropped out

of the program. In short, the purpose was to provide documentation and evidence for planners to replicate the model planning process and to validate its ability to be generalized to the population of inner-city youth.

The second purpose was to determine the impact of the program in terms of youth satisfaction and change as perceived by the youth and parents. For the first survey in which the youth were asked questions concerning their satisfaction and changes due to the program, the sample size was 264. The sampling was stratified on the three kinds of affiliations: "regular clubs" (i.e., the members met on a regular basis for an indefinite period of time); "special interest" groups (i.e., the members met for a specific purpose for a limited time period); and,"both" (i.e., the members met both with "regular" clubs and "special interest" groups). Fifty participants were randomly selected from each of the three affiliations in each of the two cities. The same sample was used for the second interview; the number of completed interviews was 212. The same stratification was used to sample the parents. One hundred and thirty-seven parents were interviewed in 1974-75 and 91 of these same parents were again interviewed approximately one year later.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

From the first youth interview, 66 percent said that they acquired new knowledge as a result of their participation.

From the first interview, 47 percent of the youth said the "experience with the Program had started their thinking about possible career choices."

From the second interview, "19 percent indicated definitely that Urban 4-H was not useful for thinking about the kinds of jobs they might become interested in when they are older."

From the second interview, "62 percent indicated they believe that some of the Urban 4-H activity might be helpful for jobs held later on."

From the initial parent interview, 49 percent (N=137) of the parents said they noticed positive attitudinal and behavioral changes that many attributed to their children's Urban 4-H participation. Types of improved changes included "play with other children" (26 percent of the parents so reported), "around home" (30 percent), "in school work" (23 percent), "toward brothers and sisters" (15 percent), and "toward parents" (22 percent).

From the parent interview one year later, parents were asked what they thought their child had learned from participating in the Urban 4-H Program during the year. Heavy emphasis of the response bearing on the learning of physical type skills or skills with things as opposed to interpersonal behavior was found. For example, 29 percent of the parents mentioned craft skills, 14 percent mentioned various new skills, and nine percent mentioned kitchen skills; contrastingly, 11 percent mentioned interpersonal skills. Only seven percent failed to notice some attitudinal or behavioral change at all among their children as a result of the program.

End Results

In the second interview parents were asked, "What particular changes, if any, have occurred within your child as a result of being in the Urban 4-H Program this year?" Twenty-six percent of the parents (N=74) gave responses that were characterized as "better social development;" 24 percent as "getting along with peers;" and 22 percent as "better self-development."

Other Program Related Findings

From the first youth interview, 75 percent (N=264) said the Program had helped them make new friends. From the second interview, 90 percent (N=212) reported that the Program had helped them make new friends.

From the second interview, 76 percent "saw Urban 4-H as a good match between the activities they liked most and learning something new." "Ninety-three percent said that they preferred to learn even more about their favorite Urban 4-H activity."

From the interview after the first year in the program, of the 264 youth interviewed in 1974-75, 179 (68 percent) reported that one or more of their regular friends also belonged to Urban 4-H. In addition, a fairly strong relationship was found between planning to remain in the program and whether or not such regular friends also were participants.

Eighty-six percent of the participants who had such friends in the program expressed definite plans to remain in it, compared to only 70 percent of those who indicated that they did not have regular friends in the program. Still, the relationship is far from clear since over one-half of the latter reported that the program had helped them to make new friends.

CONCLUSIONS

"In each of the two cities the program attracted and retained a suitably large number of youth participants with the predetermined personal characteristics required for participation (i.e., low-income, inner-city youth between nine and 13 years of age)."

The authors concluded that most of the findings were consistent with the conclusion that the Program increased social adjustment skills. The report cautioned that "while the data are consistent with the proposition that participation in Urban 4-H is associated with expansion of friendship networks for many youth, they are not proof of it. Such expansion may be a normal aging effect among people with the same characteristics as the participants.

Tait, John L., "Evaluation of the Spencer Area Leadership Self-Study Course," Cooperative Extension Service, Iowa State University, Ames, Iowa, 1969. 4 pp. (Report) (KAPPA pp. 107-109)

PROGRAM DESCRIPTION

The Spencer Area Leadership Development Correspondence Course, sponsored by the Iowa State University Cooperative Extension Service, was developed for the purpose of increasing the leadership skills and abilities of appointed and elected officials in voluntary community organizations in rural Iowa.

Newly developed materials were organized into a seven unit correspondence course on leadership principles and techniques. The first six lessons were traditional correspondence course lessons which were received and returned by mail. The seventh unit stressed the integration of the information from the other lessons and was offered face-to-face with the participants by Extension Service staff.

The six lessons were mailed in a two-week cycle, with the seventh lesson being organized as soon as possible after the sixth lesson.

EVALUATION APPROACH/METHOD

To determine the impact of the training, a stratified random sample of 88 of the trainees was selected for testing from the 353 leaders who enrolled in the course. The sample included leaders who completed all lessons, some lessons, and no lessons of the six offered. An interview schedule was developed and administered three months after the completion of the course. Schedules were completed by 87 of the leaders.

FINDINGS

KASA (knowledge, attitudes, skills, and aspirations)

Twenty-three or 26.5 percent of those 87 community leaders who were questioned perceived the course to be of "much use" in developing their leadership skills. Approximately 50 percent (N=43) of the community leaders evaluated the course as of "some" use in leadership skill development.

Practices

Forty-six percent of the respondents reported that they made use of the principles and techniques learned in the organizations with which they were connected. Most cited group techniques and communication processes as the most useful outcomes of their educational experiences.

Other Program Related Findings

The Leadership Development Correspondence Course was considered by the author as successful, especially in terms of the number of participants completing the course (53) and the number that would recommend the course to others (73).

The combination of the correspondence lessons and person-to-person interaction with instructors was perceived as innovative and will be incorporated into any additional correspondence leadership training efforts sponsored by Extension.

CONCLUSIONS

The correspondence course,with live integration of the content, was considered successful in the light of the reaction of the respondents. This was seen as significant in terms of the needs of rural Iowa for leadership training.

Williams, M.J. "Educational Effects of a Home Economics Answering Service in Iowa," Journalism and Mass Communication, Iowa State University, Ames, Iowa, 1978. 104 pp. (Thesis) (KAPPA pp. 68-70)

PROGRAM DESCRIPTION

Answer Line was originated in 1975 to provide a toll-free telephone service available to all Iowa residents to assist them with home and family questions. The system was developed to: (1) provide immediate answers to questions from Iowa residents, and (2) provide more opportunity for home economists to develop and present Extension programs. Staffed by a home economist, the service became part of the ongoing Extension program. Promotion of the service was the responsibility of the county Extension staffs. Brochures were available for distribution. News and radio releases were also made available to each county home economist for local advertising.

EVALUATION APPROACH/METHOD

The purpose of this research was to look at one method of reaching an audience with educational information. The objectives of this study were to determine: (1) the educational value and benefit of a telephone answering service to clients; (2) how information was obtained before Answer Line was used; (3) if first-time users of the service intended to use it again; (4) the use of information received in future situations of similar nature; and (5) if the clientele feels the information was accurate and useful for the specific situation.

The service records of all incoming calls from March through August 31, 1977, were used since it was the busiest period and also since there was a full-time staff to record the calls for the sample selection. Of the 8,882 calls received during that period, adjustments were made yielding a total population of 6,707 for sampling. A random numbers table was used to select a sample of 400 with a 95 percent confidence level,with 25 additional names for nonresponse.

The study examined the sample of callers to ascertain their use of and reactions to Answer Line. Educational values and benefits of the service to the client were considered through evaluation of the types of questions asked, the way(s) the answer was used by the client, and use of any suggested sources other than Answer Line. Data were collected in two stages: the actual service records and a mail survey of service users. A 28-item questionnaire was developed to give three types of information about the respondents: (1) demographic information to generate more specific information about the individuals; (2) information-seeking processes before contacting Answer Line to show information-seeking patterns for finding answers to questions; and, (3) specific reactions to the service to show the individual's use and perceived need of the service.

FINDINGS

Practices

Eighty-eight percent of the participants reported that the suggested recommendation was tried immediately; 66 percent said the information was used more than once, and 38 percent indicated it had been applied to similar problems.

Other Program Related Findings

Over one-half of the respondents had used their local Extension office before calling Answer Line; after use of Answer Line, this number fell to slightly under 50 percent. Of those who were using, and continue to use other programs of the Extension Service, more tended to be rural residents.

Between 85 - 100 percent of the respondents agreed (nine questions in the section) that the service was useful and that they were satisfied with responses received.

Individuals tended to have heard about Answer Line through word of mouth rather than through the mass media as had been predicted.

CONCLUSIONS

The result of this research, as well as other studies, seems to show a definite role for telephone answering services in educational situations. The advantages of telephone education are that it has the ability to reach an audience separated by distance, to reach homebound or hospitalized citizens, and to reach those unable to attend lectures or workshops. The service can also reach individuals on a one-to-one basis. It can answer their questions and also provide explanations which make the answers more logical. The service also allows individuals to keep their anonymity so that they feel comfortable in asking any questions.

White, Lynn and Howard Ladewig, "Texas Energy Extension Service, Lubbock Area Office, March 1978 - August 1979, Program Evaluation," Texas Agricultural Extension Service, Texas A&M University, College Station, Texas. 1979. 36 pp. (Report) (PDEMS)

PROGRAM DESCRIPTION

The Energy Extension Pilot Program in Lubbock, Texas was supported by $58,000 from the U.S. Department of Energy. The pilot program was conducted by the Texas Agricultural Extension Service over the period March 1, 1978, to August 31, 1979. The objective of this program in the Lubbock area was to help residential energy users assess their needs for energy-conserving practices and to make informed choices on energy saving practices including selection of commercial products for implementing such practices.

Information was provided on the subjects of insulation, home weatherization, ventilation and moisture control, heating and cooling systems, energy-saving living habits and alternative energy sources. Methods of information delivery were: Extension-sponsored seminars for the general public and groups interested in energy conservation (358 participants); presentations at meetings of organizations such as Lions Clubs, Scouts, and housing associations (3,300 participants); a six-part letter series on home energy conservation projects and practices (15,300 recipients) offered through distribution of enrollment flyers, exhibits at county fairs, home shows and mall displays; responses to individuals' telephone calls for information and publications (2,800); training 1,240 members of organizations through Extension volunteer leaders; and result demonstrations with eight homemakers. Through the pilot program a total of about 22,800 Lubbock area residents were contacted.

EVALUATION APPROACH/METHOD

The U.S. Department of Energy advocates the individual home energy audit as cost-effective in inducing energy-saving practices at an average program cost of $72 per client. An evaluation of group and mail methods of the Lubbock Energy Program was conducted in order to determine if methods costing less per client than the individual audit can be effective in inducing energy-saving practices.

The study obtained data on specific, self-reported conservation practices completed before and during the Lubbock Energy Program by people who had had varying intensities of contact with the program, including no contact at all. A total of 500 Lubbock area residents were selected for interviewing. One hundred nonparticipants were selected randomly from the Lubbock area telephone directory. And, 100 names were selected randomly from the registration or enrollment lists of participants who had been exposed to each of four intensities of contact with the Lubbock Energy Program. These variations in intensity, beginning with no intensity, are as follows: Intensity 1: Comparison set of nonparticipants. Intensity 2: Participants received an Extension letter series through their enrollment by organizational or club officer, e.g., coop managers. Intensity 3: Participants received the letter series through self-enrollment in response to distribution of enrollment flyers, mall displays, etc. Intensity 4: Participants were exposed to Extension presentations at meetings or organizations, or clubs,

followed by self-enrollment in the letter series. Intensity 5: Participants chose to attend Extension-sponsored presentations for the general public and self-enrolled in the letter series.

A consulting firm conducted telephone interviews with those selected for the sample. Respondents were questioned on their concern regarding energy conservation, home ownership and length of residence at their present home, energy meeting attendance and letter series participation, sources of energy information, and adoption of energy-saving practices. A basic feature of the overall analysis was to compare energy-saving practices of the four Intensity Groups and the Comparison Group.

FINDINGS

Practices

The analysis shows the percent of each of the five Intensity Groups (above) who implemented, before and during the Lubbock Energy Program, selected energy-saving practices (caulking and weatherstripping, insulation, attic ventilation, window treatments, heating and cooling alterations, and landscaping). Based on all six of these types of practices, the average percentages of residents who implemented energy-saving practices before and during the program are as follows:

Intensity 1: 15% before, and 18% during;
Intensity 2: 21% before, and 18% during;
Intensity 3: 13% before, and 22% during;
Intensity 4: 19% before, and 19% during; and,
Intensity 5: 29% before, and 18% during.

These findings indicate that all Intensity Groups had similar "during" average performance rates across the six conservation practices. Analysis showed that 63 percent of the 400 participants adopted at least one conservation practice during the program, while 58 percent of the comparison group completed at least one of the practices. The greatest average improvement (13% before and 22% during) in performance occurred in Group 3, i.e., the participants who self-enrolled in the letter series without first attending organizational meetings or seminars at which Extension energy presentations were made.

Data also indicate a greater trend among Intensity Group 3 toward practice-implementation during the program by family members compared with practice-implementation prior to the program contractors.

Other Program Related Findings

Most respondents were homeowners occupying single-family dwellings. Respondents generally were very concerned about energy conservation in their homes. High bills rather than tax incentives were reported most often as influencing adoption of energy-saving practices. Time and money shortages were reported as the greatest barriers to completion of energy-saving practices.

The cost of the Lubbock Energy Program averaged $2.57 per client.

CONCLUSIONS

Inexpensive group and mail educational methods can be effective in facilitating the adoption of home energy-conserving practices. The use of group and mail methods through adding new program personnel to an existing educational delivery system is more cost-effective than individual service (energy audit) programs in inducing completion of energy-saving tasks. Direct mailings to those who request information without first attending energy presentations seem especially effective. In the Lubbock area, such persons were doing the least to save energy prior to the program, but after receiving the letter series performed energy-saving practices at a rate similar to that of participants with more intensive program contact.

Group and mail methods can facilitate family members toward performing energy-saving practices rather than depending upon contractor assistance.

Policy makers who are responsible for energy conservation programs should consider group and mail methods as provided by Cooperative Extension Service.

TIME-SERIES

Balliet, Lee. "Stimulating Livestock Production in the Allegheny Highlands: An Economic, Social, and Attitudinal Evaluation of a University Pilot Program," West Virginia University, Morgantown, West Virginia, 1978. 104 pp. (Report) (KAPPA pp. 10-14)

PROGRAM DESCRIPTION

The Allegheny Highlands Project (AHP) was an experimental program jointly funded by West Virginia University ($214,455) and the Rockefeller Foundation ($518,508). This report deals with the period, 1970 - 1975. The AHP, characterized as an "Extension-type program," had as its overall purpose to increase the economic and social welfare of the population in the project area. The purpose of the agricultural portions of the project were to introduce innovative technologies to the livestock industry. Four specific objectives were defined, each in a different technical area:

(1) To bring about a 300 percent increase in forage and crop production;

(2) To improve livestock selection, breeding, and marketing through selective culling of breeding stock, cross-breeding, and other techniques (No numeric goals are listed in the paper);

(3) To improve animal health through the prevention of disease, malnutrition and parasites (no numeric goals); and,

(4) To encourage improved recordkeeping by fostering the concepts of planning and administration of farm efforts (no numeric goals).

Efforts focused on 40 farm operators who signed a "memorandum of understanding" to participate in the project. This memorandum outlined the services which AHP would provide: expert consultation in planning and assistance in recordkeeping. Testings of various sorts also were provided at a small cost to the farmers. Services were delivered through newsletters, personal visits, and group meetings (field days, talks to local agricultural organizations, etc.). Participating farmers agreed to try recommended new methods and technologies and to keep detailed records using a data system designed by the university.

The AHP intended a "project team approach," whereby four types of specialists (an agronomist, animal scientist, veterinarian, and farm management specialist) would work together with cooperating farmers. This concept was felt to be an improvement on the single agent, as the team would be better able to keep up with progress in separate disciplines. Unfortunately, the full complement of specialists was never recruited.

The AHP was directed at farmers in Randolph and Upshur Counties, West Virginia. Cooperators were recruited from farm-resident males, preferably under 40 but not over 55, with a minimum of 50 acres of open land suitable for forage and crop production and committed to certain minimum livestock production levels. Forty cooperating farmers were recruited (20 short of projected goal). Compared to the "average" farmer in the two-county area, participating farmers operated somewhat larger, more valuable acreage and had considerably higher sales of agricultural products; in general, very large and very small farms were somewhat overrepresented among cooperators. Participants were younger in average age (44.0 years) than the general population, but older than the original recruitment goals.

EVALUATION APPROACH/METHOD

Although the AHP began in 1970, the evaluation effort began in 1975 or 1976. It dealt with the first five years of the project's operation (yield years 1971 - 1975). The purpose of the study was to measure social and economic changes that have occurred among the farm operators directly affected by the AHP. Where applicable, the project's stated goals and objectives were used as evaluation criteria.

Five areas of evaluation are listed by the author:

(1) Economic changes experienced by participating farms since the project's inception (a time-series analysis of project participants; no control panel or information);

(2) The conduct of project activities in relation to participants' needs and expectations indirectly addressed by three post-test (1975) evaluations of satisfaction;

(3) Organizational environment in which the project functioned (historical analysis based on interviews with staff, other participants);

(4) Impact of project activities on the larger community (assessed by hearsay: cooperating farmers, field staff and others were asked the degree to which they believed nonproject farmers had instituted project recommended innovations); and,

(5) Agency and community evaluation of the project (questionnaire data).

Two types of study design, as noted above, are employed. Studies of production and financial return use a time-series approach, noting changes in these variables over years of the project. Measures of attitudinal change and of behavioral change are administered only at the end of the period being evaluated (1970 - 1975, post-test only). Statistical data both internal and external to the project (records required from participating farmers and field staff) and interviews and/or questionnaires completed for 40 cooperating farm operators. seven project and university administrators, seven university resident

panel members, 15 field staff, 11 community leaders, and nine agricultural agency heads make up the study's primary data sources. For attitudinal studies, a "random" sampling of nonparticipating Randolph and Upshur County farmers is used (n=20; response rate not given), as well as a report on the views of other West Virginia farmers solicited from 53 area county Extension agents outside the project area.

Measures of project impact included dollar amounts for financial return, livestock and grain production weight, self-reported changes in attitude, and opinions of the degree of adoption of new practices. Anecdotal information was also provided, particularly in the review of project organization and administration.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

Seventy percent of AHP participating farmers, but only 20 percent of other project area farmers and 25.8 percent of other West Virginia farmers (as reported by Extension agents), felt that they were more confident than they had been five years ago.

Similarly, 82.5 percent of AHP participating farmers, versus 65.7 percent of other West Virginia farmers (as reported by Extension agents), reported deriving "a great deal" of personal satisfaction from farming.

Of the 74 individuals interviewed, including project farmers, project field staff, agricultural agency heads and community leaders, 40 felt that the project had considerably improved farmers' understanding and working relationship with agricultural agencies.

Practices

Cooperating farmers, field staff, and others were asked to state the degree to which the community had adopted project-recommended practices.

(1) Nine of 40 farmers felt that over one-half of the nonproject livestock producers in the area had adopted one or more project recommendations; however, only one of 15 field staff gave a similarly large estimate.

(2) The specific practices most frequently cited as having been adopted by the farming community at large were external parasite control and soil testing.

(3) Ninety-five percent of cooperating farmers said they had incorporated most or all of the project staff recommendations into their farming practice (specific recommendations not analyzed).

(4) With regard to animal health, the author reports that "project records show evidence of steady improvement in the use of preventive health care measures, especially in the control of internal and external parasites in years 1971 through 1974." (Details are not given concerning improved practices; before/after assessment of herds/flocks in terms of health is not provided.)

(5) The author reports that recordkeeping in general was carried out poorly, both by participating farmers and by staff. The author attributes this lack, in part, to the absence of a farm management specialist on the staff of the project.

End Results

Eighty-two and one-half (82.5) percent of all participating farmers felt that their overall farm operation had shown improvement. However, field staff felt that 67.5 percent of the operations had improved, while project senior faculty felt that only 50 percent had shown improvement. Examination of the rates of return were complicated by the fact that 1974 and 1975 were bad years for farmers, who negotiate in a buyers' market in which they have little control over the price received. Average returns per farmer for the years studied were: 1971 -- $3,555.29; 1972 -- $5,545.16; 1973 -- $7,840.76; 1974 -- $479.27; 1975 -- $1,612.03. Participating farmers also reported that the AHP had a beneficial effect on their families, their "reputation as a farmer," and their level of participation in various agricultural organizations. Ninety-five percent of cooperating farmers said that nearly all of the practices recommended by project staff were successful in their operation.

Results in areas identified as AHP objectives were as follows:

Forage and crop production --Average corn grain yields for participating farmers in 1975 were roughly equal to 1971. Average silage yields increased some 20 percent between 1971 and 1975. Average tons of hay per acre in 1975 were nearly 40 percent above 1972.

Livestock --Quality improved (superior stock, cross-breeding) as evidenced by 205 day weights recorded for feeder calves: 1971 -- 424 pounds; 1973 -- 449 pounds; 1974 -- 456 pounds (other years not given).

The author did not attempt a cost/benefit study of the project as part of the evaluation. However, he offered the following thesis: If, in 1975, approximately 2,000 farmers received "considerable" benefits from the project -- i.e., $100 in extra income -- and 4,000 farmers received "some" benefit -- $25 extra -- then the benefit would be $300,000. By 1973, the AHP was costing $150,000 per year. This ratio indicates revenue in excess of expenses after a five-year period.

CONCLUSIONS

The project had a sizable positive influence . . . but was unable to effect and test a 'package, team approach' to livestock agricultural development.... (It) .... foster(ed) the adoption of selected innovative production techniques, as well as more objective social and attitudinal perspectives.

Brown, Janet S. and Helen Y. Nelson. "Tenant Orientation Programs Specialist Training Program," College of Human Ecology and College of Agriculture and Life Sciences, Cornell University, Ithaca, New York, c. 1977. 290 pp. (Report) (KAPPA pp. 38-40)

PROGRAM DESCRIPTION

The Tenant Orientation Program Specialist (TOPS) training program was a research demonstration program with a curriculum designed to train specialists for the diverse problems and roles of liaison between residents and managers in rental and cooperative housing developments. The goal of this program was to train a corps of specialists who could encourage the "cooperation of tenants in the management process" in order to "stabilize" the New York City and New Jersey Mitchell-Lama/236 housing developments. The training course, established and conducted by the Cooperative Extension Service, New York City Programs, Cornell University, was designed and delivered by a staff comprising a social worker, two home economists, an aide, and a secretary. Eight-week courses (three sessions per week) of lectures, demonstration projects, workshops, films, and field trips to housing sites were supplemented by follow-up on-the-job sessions including observation and further counseling and assistance. The immediate clientele comprised 68 men and women trainees in New York City and New Jersey, recruited by housing sponsors or their management firms. Fifty trainees received certificates of participation upon completion of the training sessions. An estimated 18,349 families were influenced directly or indirectly by the work of these trainees.

EVALUATION APPROACH/METHOD

The objectives of the evaluation built into the program itself included measurement of trainee learning, and evaluating the effectiveness of the program in relation to trainee knowledge and on-the-job performance. The study design established two phases of evaluation: (I) training course tests and measures; (II) postcourse, on-the-job evaluation surveys. The study appendix includes 68 pages of evaluation instruments administered throughout the program and follow-up evaluation phases. Seven Phase I instruments included staff records of class observation, curriculum content tests, pre- and post-test teaching/learning strategies, achievement tests, a rating scale for job performance, interviews following work experience with tenant orientation responsibilities, and trainee perception interviews. Seven Phase II instruments included English and Spanish version tenant surveys, housing development data forms, manager interviews, a log form of TOPS-tenant contacts, program guidelines and program description, and a Guttman scale for evaluating tenant perceptions of TOPS and the orientation program. The study evaluates the Phase I instruments for the 22 trainees who participated in the first three of seven (n=68) training groups. Eighteen of the 22 initially-accepted trainees continued through the full 14-month lesson and follow-up sessions; different instruments were applied to different base numbers of trainees. Phase II evaluates the performance of the five (of original 22) trainees who continued to be

employed with tenant orientation responsiblities into the second year. Questionnaires mailed to all tenants (n-1, 116) in four of the housing units where TOPS trainees were employed (the evaluators were unable to obtain tenant mailing lists of the fifth housing unit due to right-to-privacy objections) yielded a return of 18.55 percent. A telephone follow-up to 10 percent of the nonreturns supplemented the mail return for a total response of 27.5 percent. All managers' representatives of the five housing units represented were interviewed. The study evaluates each of the original 22 trainees individually up to the point at which he or she left the program.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

The authors find that test scores from the curriculum content and teaching/learning achievement tests "in most cases showed improvement." The highest ranking trainee in the overall evaluation rating received the equivalent of the mean score in the achievement post-test; however, she did in fact receive the highest rating for tenant orientation and services. Except for early dropouts, all the trainees expressed satisfaction with what they had learned, stated that they had gained confidence from the program and felt well prepared for the job of Tenant Orientation Program Specialist.

Practices

Of 22 trainees originally enrolled in the course, 18 completed the class sessions and began working as specialists with follow-up sessions. Of these 18, 11 continued through the first year as TOPS and five continued to be employed with direct tenant orientation responsibilities into the second year.

End Results

Results of the impact of the five TOPS continuing into their second year were evaluated by responses from tenants and from managers of the housing developments in which they were employed. The tenants responding to the evaluation questionnaire indicated that the TOPS had been helpful in varying degrees for different types of tenant orientation problems: 57 percent listed TOPS as helpful in settling into the new building; 49.5 percent stated TOPS had provided helpful information about the community; 49.3 percent had received individual attention from the TOPS on moving in. Other areas in which the specialist had been helpful included problems with the lease, with maintenance, with rent payment, and noise in the building. All the managers responded positively noting a "better atmosphere" and improved tenant-management relations. Staff observations and interviews with trainees complemented the findings of tenants and managers.

Other Program Related Findings

The study found that the personality and maturity of the individual trainee was more important than sex or age. The cooperation of the housing development managers was very important both in selecting trainee candidates and in facilitating the program objectives through the TOPS. Tenants who had had direct contact with a TOPS indicated a

higher positive response to the TOPS assistance and service. Continued supervision and counseling support after the training program was completed and important. Neither tenants nor managers would be willing or able to finance such a program themselves.

CONCLUSIONS

The authors concluded that the program had provided training "at relatively small cost" for a corps of specialists who had been helpful in orienting housing development tenants in new surroundings, and that their services were perceived as beneficial to management.

Carter, Cecil E. Jr. "Program Impact Evaluation: Developing Procedures for Evaluating the Impact of Extension Programs," Agricultural Extension Service, University of Tennessee, Knoxville, Tennessee. No date. (circa 1980). 40 pp. (Report)* (PDEMS)

PROGRAM DESCRIPTION

Objectives of this program from a state-wide perspective appear to be to increase dairy production and the efficiency of production. These objectives may be inferred from the study report based on the production indicators used and the practices recommended in the program.

Program content selected to help achieve these objectives focuses on recommended practices including: heard management practices, forage production practices, breeding practices, herd nutrition practices, and farm recordkeeping practices. Educational delivery methods include farm visits by Extension staff, clientele visits to Extension offices, group meetings and publications.

The primary audience for the program are the nearly 2,000 Grade A dairymen (those certified as meeting Tennessee hygienic standards in milk production) in the 40 major dairy producing counties in the state. A major dairy producing county receives 40% or more of agricultural income from dairy or has total dairy income of at least $750,000 per year.

EVALUATION APPROACH/METHOD

Purpose of this aspect of the multi-volume study was to establish the extent to which Tennessee's Extension Grade A Dairy Program operations are related to intended effects of the dairy program. Information from the study is intended for use primarily by administrators at the state level to document the worth (e.g., effectiveness) of Extension programs to funding groups.

The study tests whether or not the values of selected indicators of program operations are associated with positive outcomes.

Variables on program operations include: (1) number of contacts which dairy producers reported having had with Extension agents (and other agricultural agents) over a 12-month period through Extension meetings, visits to the Extension office and Extension visits to farms (obtained via a survey of 651 randomly selected Grade A dairymen in 34 counties, conducted by county Extension leaders in the Fall of 1975 after first being provided

*There are six other documents in this multi-volume report. In order of relevance to an understanding of the subject report, they are (by the same author and agency): (1) "Identifying, Measuring and Testing Indicators of Educational Inputs and Outcomes for Planning, Monitoring, and Evaluating the Impact of County Extension Programs;" (2) " Program Monitoring Evaluation;" (3) "Program Planning Evaluation;" (4) "Status of the Tennessee Information System for Planning, Monitoring, and Evaluating the Impact of County Extension Programs;" (5) "Status of the Tennessee Information System for Planning, Monitoring, and Evaluating Agricultural Extension Programs;" and (6) "Program Development Model."

with four hours of in-service training in prescribed interview procedures); (2) number of hours Extension agents spent per Grade A dairy producer over a five-year period (1971-75) working on ten dairy production subjects. as obtained from activity reports submitted weekly by Extension staff.

Information on clientele characteristics, behavior, and conditions are also based on the 1975 random sample of 651 Grade A dairymen. A composite indicator of 20 variables was developed by factor analysis (using weights from the first principle component of their intercorrelations). Types of variables included in this indicator were: (a) specific, current dairy-related practices and changes which took place in the preceding five year period (e.g., keeping milk production records, breeding records, and total farm records; and following forage production, breeding management, and herd replacement practices); (b) average pounds of butterfat produced/cow, increase in herd size, and in average pounds of milk/cow since 1970; (c) conditions of building and equipment; (d) background characteristics of the dairymen (e.g. age, educational level, number of years they plan to stay in dairying); and (e) other dairymen activities (e.g. number of contacts with government agencies and number of different information sources used).

For each of the 34 counties, averages were computed for the composite indicator, and these averages were then related to the average number of hours per dairy producer that agents reported spending on each of ten dairy subjects over a five-year period. Linear correlation and regression and non-linear regressions were used to assess the magnitude of program operations - outcome relationships. County aggregates as well as the individual dairymen were used as the units of analysis.

FINDINGS

Practices and End Results

Differences among individual dairymen in their use of 47 recommended dairy production practices were related to the type of contact with Extension as follows: (1) farm visits (62% of the variance); (2) office visits (27%); (3) meetings (12%); and, (4) total contacts (37%).

Differences among individual dairymen in the change in pounds of milk produced/cow were related to the type of contact with Extension as follows: (1) meetings (54% of the variance); (2) farm visits (42%); (3) office visits (13%); and (4) total contacts (35%).

For the 651 individual dairymen, curvilinear regression analysis showed that increasing values of the composite indicator were associated with an increasing number of contacts with Extension (either farm visits, group meetings, office visits or total types of contact) but that a plateau in this relationship was soon reached (after about one-half or less of the total contacts of whatever type).

Over 71 percent of the variance (differences among the average dairy producer in each county) in the composite indicator was associated with the differing average amount of time the agents in each county had devoted to the ten dairy production topics.

Other Program Related Findings

Total contacts with Extension were related to the: age of dairymen (59% of the variance) with the younger ones having more frequent contact; education of dairymen (42%) with the more educated having more contact; and size of herd (21%) with the larger herdsmen tending to have more contact.

A relatively small percentage of the dairymen reported a relatively large proportion of total contacts dairymen had with Extension (1/4 had no contact at all).

CONCLUSION

The relationship between the Extension dairy program operation and intended dairy production outcomes (use of recommended practices) is as follows: as program operations increase, dairy production outcomes become more positive but at a decreasing rate. This curvilinear relationship implies that the greatest amount of improvement (e.g. in use of recommended practices) can be achieved by distributing Extension's contacts more broadly among dairymen.

Crowe, Natalie D., Barbara A. Pine, Irene W. Stein. "Family Day Care, a Cooperative Extension Pilot Program," New York State College of Human Ecology, Cornell University, Ithaca, New York, 1975. 69 pp. plus appendix. (Report) (KAPPA, pp. 44-46)

PROGRAM DESCRIPTION

The Family Day Care Pilot Program was an exploratory effort jointly undertaken in 1972 in Nassau County, New York, by Cooperative Extension at the New York State College of Human Ecology and the Cooperative Extension Association of Nassau County to strengthen the existing system of family day care available for moderate and low income families.

Major goals were to identify family day care providers and their needs as they perceived them, and to design with them and conduct a continuing education program answering to these needs. Additional goals were to test the feasibility of Cooperative Extension in the role of broker between providers and those whose children require day care, and to explore the coordinating and leadership role that Cooperative Extension could play in linking agencies responsible for comprehensive child care in a community.

From the interaction of day care providers, parents, and staff at the storefront resource center, a multifaceted program was developed to include: informal education programs such as workshops, and a certificate course for care providers; training in child development for teen aides; a newsletter; a loan service of toys and equipment; assistance to parents in exploring child care options and locating care providers; and working with community agencies to encourage support of family day care and linking it with the existing community service network. The program was directed by a Cooperative Extension specialist in family day care.

EVALUATION APPROACH/METHOD

Evaluation was designed to determine: (1) to what extent the intended program was actually carried out; (2) the improvement of relevant knowledge, attitudes, or skills among program clientele; and (3) the duration and degree to which such improvement resulted in beneficial change in clientele behavior or in the structure of the community. The evaluation was conducted according to a method which conceived of program components as operating on the following hierarchical levels: inputs; activities; people involved; reactions; knowledge, attitudes, skill change, and aspirations (KASA); practice change; and end results.

From January 1973 to June 1975, 297 different day care providers participated, as determined from a log kept at the resource center. No attempt was made to assess program impact on parents utilizing center resources. Pre-tests and post-tests were administered to measure learning among 37 participants during the certificate training course. These participants completed a course evaluation questionnaire. A tape-recorded

interview was used to assess program impact upon a sample of 64 providers from Nassau County and was compared with responses from a comparison group of 48 day care providers from Westchester County.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

Participants showed a statistically significant improvement ($P \geq .05$) in their knowledge about child behavior and development as measured by a 15-item instrument administered before the first lesson and at the end of the certificate training course.

As the program progressed, providers developed "a different sense of themselves in relation to what it means to be a day care mother; they're more sure of themselves and what they're doing."

Practices

A support system was provided for family day care providers, linking agencies in the community with an interest in child care and catalyzing cooperative efforts involving these agencies.

Other Program Related Findings

An unexpected outcome was the degree of leadership and self-direction developed by the family day care providers as exemplified by the formation of the Nassau County Family Day Care Association.

Multiple regression analysis showed that the more frequently day care providers participated in the program, the more likely they were to recognize and act upon the recognition that family day care is an occupation with prescribed hours and not an informal "neighboring" arrangement.

CONCLUSION

Day care mothers, when involved in developing their own progress and when offered particular resources, responded by attending meetings and social events, enhancing their knowledge of child behavior and development, becoming more aware of how common their occupations were, and perceiving their jobs as more than just "babysitting." The program did not demonstrate any improvement in child care because program leaders deemed inadvisable any attempt to obtain such direct evidence by observing the day care providers in their own homes. "Testimonial data from community support structure for family day care providers has changed in Nassau County as a result of the Cooperative Extension Family Day-Care Program."

Hartman, J. A. and E. J. Brown. "Evaluation of A Five-Year Demonstration Farm Program in Two Pennsylvania Counties." Pennsylvania State University, June 1970. (SMC pp. 107-109)

PROGRAM DESCRIPTION

The program described in this study was a result demonstration program in Pennsylvania. The intended outcomes included: an increase in the confidence of local farmers in the Extension Service and in the local Extension staff; the motivation of farmers to seek more information on recommended practices; the adoption by farmers of recommended practices; and improved overall farming conditions.

Eighteen demonstrators (nine each in Indiana and Susquehanna counties) were chosen for the project. The county Extension staffs, together with the university Extension specialists, evaluated the demonstrators' fields and formulated general plans for the participants. They built a five-year action educational program around the demonstration farms with the view that knowledge and recommended practices introduced or emphasized on the demonstration farms would filter out to neighboring farms. The Extension Service assisted the demonstrators in making essential surveys, soil tests, farm business analyses; and livestock, equipment and land utilization plans. The program also included training sessions, correspondence courses, provision of some materials at cost, and direct contact with the associate county agent.

EVALUATION APPROACH/METHOD

The primary objective of this study was to determine the extent to which the educational program, structured around 16 demonstration farms, achieved its primary desired results:

> To create an awareness of the material content of the program, particularly of selected farm practices.
>
> To induce the adoption of these practices by members of the target audience, the dairy farmers in the two counties.

The researchers interviewed all dairymen shipping fluid milk in the southern two-thirds of Indiana county because all but one of the demonstration farms were located in that part of the county. In Susquehanna county, six of the nine demonstrators were located on a diagonal line from the southwest corner to the mid-northeast border of the county, and interviews were taken of all dairymen shipping fluid milk in this diagonal band. The other three demonstrators were located in the southern tier of the county. One of these was chosen at random, and the dairymen within a four to seven mile radius around him were interviewed. The sample consisted of 620 farmers in all, or roughly 1/3 of the total number of dairymen in the county.

The data were collected in benchmark and terminal interviews which were substantially identical. Interviewers were university students, both graduate and undergraduate, and all had farm backgrounds. The interviewers were trained and evaluated before they were sent out into the field.

The instrument elicited information on the adoption or nonadoption of 19 recommended practices. An index was constructed to express quantitatively the fraction of the 19 practices applicable to a respondent's situation which he had adopted. The data were statistically manipulated using multiple linear regression correlation analysis which allows the assessment of the individual and joint effects of a multitude of possible contributing factors.

FINDINGS

KASA (knowledge, attitudes, skills, and aspirations)

87% of the dairy farmers in both counties reported hearing about the program.

27% of Indiana County respondents, as opposed to 15% of the Susquehanna dairymen, responded inappropriately to questions about the emphases of the program.

37% of the Indiana County respondents and 12% of the Susquehanna County respondents incorrectly named farmers who were not demonstrators.

Practices

In Indiana County, the relationship between knowledge of the program and change in practice usage increased to a significant level beyond .01.

In Susquehanna County there was a relationship, at the .01 level of significance, between the distance from demonstration farms and change in practice usage. The same trend was present in Indiana County, though not statistically significant.

The number of demonstrators to whom the respondents had talked during the last three years of the program ranked first among all independent variables in Susquehanna in relative amount or influence on change in practice usage and sixth in Indiana County.

CONCLUSIONS

The findings indicate a relatively high level of general awareness of the demonstration farm program in the two counties.

Knowledge about the program seems to have an influence on change in practice usage.

Kingdon, Lorraine B. and Ulrich C. Toensmeyer. "Food Consumption Practices of Families in the EFNEP in Lower Delaware," Agricultural Experiment Station, University of Delaware, Newark, Delaware, 1975. 52 pp. (Report) (KAPPA pp. 182-84)

PROGRAM DESCRIPTION

The Expanded Delaware Nutrition Education Program in lower Delaware was a 24-month education program administered by paraprofessional aides trained by Extension supervisors. The goal was to improve nutrition knowledge and food consumption habits of low income rural and metropolitan families in lower Delaware. The program was delivered via personal home visits by indigenous paraprofessional aides.

EVALUATION APPROACH/METHOD

The purpose of the evaluation was: (1) to determine food consumption and dietary knowledge of families in the Expanded Delaware Nutrition Education Program when they enter the program, and 6, 12, 18, and 24 months later; (2) to determine changes in food consumption practices and dietary knowledge after 6, 12, 18, and 24 months; (3) to determine possible correlations between family characteristics and changes in food consumption practices and dietary knowledge. Tests were utilized to measure food consumption practices and nutrition knowledge at the beginning of the program, and at six-month intervals during the course of the 24-month program. Family characteristics were also compared to determine whether they affected consumption practices and knowledge. Data were collected by personal interviews using standard questionnaires (USDA Family Record and the Homemaker Food and Family Income and Food Expenditure Record) administered to the sample participants by the nutrition aides. Clientele for the study resided in non-metropolitan areas in the counties of New Castle, Kent, and Sussex in lower Delaware. A random sample of families was taken from lists compiled by the aides of participants who completed at least six months of the program. The total program participant population was not indicated. Fifty-two sample families were taken from New Castle County, 32 sample families were taken from Kent County, and 49 sample families were taken from Sussex County.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

At the beginning of the program, 80 percent of the sample knew that every food group was needed although none of the homemakers knew the recommended numbers of servings of all food groups. After six months, the sample from lower New Castle County improved in dietary knowledge to where 9.6 more homemakers per 100 were able to name the recommended daily number of servings of each food group. In the Kent County sample, 18.8 more homemakers per 100 were able to name the recommended number of servings. In the Sussex County sample, 2.0 more homemakers per 100 were able to name the recommended number of servings. After six months, 10 homemakers per 100 in the total sample were able to name

the recommended daily number of servings of each food group. (Data for measurements at 12, 18, and 24 months are not presented.)

Practices

After six months in the program, 11.6 percent of the sample were eating the recommended number of servings of the four food groups, an increase from 2.6 percent. After 12 months in the program, 6.7 percent of the sample were eating the recommended number of servings, a decline of 4.9 percent from the six-month score. After 18 months, 16.5 percent were consuming the recommended number of servings, an increase of 9.8 percent from the 12-month mark; and after 24 months, 14.8 percent of the sample were consuming the recommended number of servings of the four food groups, a decline of 1.7 percent from the 18-month measurement.

Homemakers improved their consumption of the fruits and vegetable group more than any other food group during the first six months of the program. After that, the bread-cereal group showed best improvement. For fruits and vegetables, 29 percent of the homemakers consumed the recommended number of servings after six months compared to 10 percent at the beginning of the program (the figures for the 12-month period do not match, apparently due to an error). After 18 months, 38.2 percent and after 24 months, 35.4 percent of the homemakers consumed the recommended number of servings.

For milk, 41 percent of the homemakers consumed adequate numbers of servings after six months compared to 27 percent at the program beginning; after 12 months, 20.8 percent; after 18 months, 50.5 percent; and after 24 months, 37.0 percent of the sample consumed the recommended number of servings of milk.

For breads-cereals, 36.3 percent of the homemakers had adequate numbers of servings after six months compared to 28 percent at the beginning of the program; and for meat, 88.2 percent of the homemakers ate the recommended numbers of servings after six months in the program, compared to 83 percent at the beginning of the program.

Other Program Related Findings

The level of homemaker education was not associated with changes in either food knowledge or consumption. Participants receiving income supplements improved less. Homemakers who were able to spend the most per capita improved their diets the most. However, those spending the least for food showed the greatest increase in dietary knowledge, but their diets improved at a lesser level.

CONCLUSIONS

Food consumption habits did not match the homemakers' knowledge of food necessary for good health. Four-fifths of the sample homemakers knew that every food group was needed for a good diet, yet only 2.6 percent were receiving the recommended number of servings of all food groups at the beginning of the program. After six months, 11.6 percent of the sample were eating the recommended number of servings of all food groups. Participicants reported increases in consumption of all food groups, especially fruits and vegetables, where consumption was low. Indigenous paraprofessional aides achieved changes in consumption practices and dietary knowledge. Once training goes beyond 18 months, diminishing returns set in.

Ladewig, H.W., and V.W. Edmondson "The Effectiveness of Non-Professionals in Cooperative Extension Education for Low-Income Farmers." Extension Publication #B-1122, Texas A&M University, 1972. (SMC, pp. 21-23)

PROGRAM DESCRIPTION

The Intensified Farm Planning Program (IFPP) was a pilot program conducted by the Texas Agricultural Extension Service which utilized Agricultural Program Aides in Cooperative Extension education for low income farm families in ten counties throughout Texas.

Clientele who were selected for participation in the program were small farm operators who were not active participants of ongoing Extension educational programs, with first priority given to low income farmers. The intended outcomes included an increased and intensified acceptance of Extension educational assistance; an increased knowledge of production agriculture and management practices; adoption of the Extension Service's recommended practices and procedures in production, and marketing; increased utilization of services of Extension and other agricultural agencies; and an increase in the income of the farmer through greater sales of farm products.

EVALUATION APPROACH/METHOD

The Intensified Farm Planning Program (IFPP) was targeted at low income farmers in ten counties in Texas. The interim evaluation report, published in 1972, measured the impacts of the program up to that point in time. There were 224 program participants (farm operators). The criteria for selection of small farm operators were:

General lack of previous participation in Extension programs.

Receipt of a major portion of income from the farm operation.

Priority was given to farmers with the lowest gross annual income.

The county staff office supplied the names of farmers that fit the above requirements to the study committee. Data were collected utilizing several procedures. Benchmark information was collected on each individual when he entered the program. A questionnaire was administered during the second year of the program to elicit similar background information. Field interviews were conducted by the research team to record personal observations.

The interviewing team planned an initial home visit and two follow-up visits for those family members not contacted at the initial visit. As a result of these interviews, the research team interviewed seventy percent of the program participants. Comparison between data collected from the field interviews and the benchmark data led the research team to hypothesize that there would be no significant differences in subjective responses to questions between those interviewed and those not. Farmers' perceptions of services offered by the Texas Extension Service were measured through the use of a self-anchoring scale in which each participant was first asked to describe the type of assistance provided

to him by the Extension Service and then to list the most effective and least effective type of assistance offered. Participants were asked to indicate on a ten-point ladder scale how effective the types of assistance offered by the Extension Service were at the present time. Two additional questions were asked pertaining to past effectiveness and future expectations of the Extension Service.

The acceptance of services of selected USDA agencies was determined by comparing the number of participants who utilized these services in the benchmark year and in 1970. It was hypothesized that an increase in acceptance of educational assistance by program participants would be accompanied by an increase in the number of participants who adopted recommended farm practices. Comparisons were made between corn production, truck crop production, and livestock production for the two years 1968 and 1970. Changes in gross farm income and level of living were also measured for significant changes.

FINDINGS

Practices

Participants exhibited greater use of services of other USDA services (17.2% - 42.7% increase in use of SCS, ASCS, and FHA programs by participants between 1968 and 1970, and sizabe increases occurred in the number of participants following recommended practices for land preparation (42.9% increase), variety planted (8.6% increase), seed planting rates (22.6% increase), fertilizer application (42.1% increase), and weed control (31.8% increase).

The number of applicants applying for loans from FHA for new homes and home improvements increased significantly after program aides assisted farmers in the application process.

Other Program Related Findings

Nearly 70% of the program participants stated that the Extension Service was a source of general information. The most effective types of assistance offered by the Extension Service were personal advice, information about participation in government assistance programs, farm visits, and help on specific programs.

End Results

In Corn production, yields increased by 52% in 1970 over 1968.

Data indicated an increase of almost 25% per participant in livestock income and an increase of 0.6% for crop income.

CONCLUSIONS

The participants' increased acceptance of recommended farm practices was associated with the participants' increased attendance of meetings and courses sponsored by Extension and other agricultural agencies.

Program aides work effectively with low income small farm operators in dissemination of information and demonstration of production agriculture and farm management practices.

Marks, R. J. "A Comparison of the Effectiveness of Group Camping Experiences on Change of Self-Concept for Campers with Professional and Non-Professional Group Leaders". Doctoral Dissertation, West Virginia University, 1971. (SMC pp. 181-82)

PROGRAM DESCRIPTION

A weekend camping program was offered to 7th and 8th grade 4-H Club members and non-members in central West Virginia (Appalachia). This program consisted of counseling sessions focusing on interpersonal relationships in the family, school, and community.

Publicity for the program was centered in schools with guidance counselors providing information on the program and encouraging participation.

The program utilized two different types of staff involved in program delivery: professional and non-professional group leaders. Professional group leaders were Masters degree candidates in counseling,and non-professional group leaders were Extension-trained volunteer leaders.

Intended outcomes of the project were aimed at improving the self-concept of the youth involved in the program.

EVALUATION APPROACH/METHOD

The study had two specific objectives:

To measure any change of the self-concept of participants in the program.

To compare the effectiveness of professional group leaders and non-professional group leaders in influencing changes in the self-concept of participants.

A total of 243 boys and girls from 17 counties in West Virginia were involved in the program, which was divided into two sessions (group A and group B). A personal data questionnaire and an adaptation of Bills (1958) Index of Adjustment and Values (IAV) for Self, were utilized in collecting data. A pretest, posttest, and post-posttest were administered to the participants. Eighty-six respondents completed all three tests and constituted the sample from which data were collected. The first two measures were obtained while the campers were at the camp and the third measure was obtained through mailed IAV forms 10 weeks after the program ended.

Analysis of variance was used in the statistical treatment of the data.

FINDINGS

End Results

The obtained f-ratios indicated that the campers' Discrepancy scores (self-concept score and concept of ideal self score) were significantly lower for both groups on the posttest and post-posttest, as compared with the pretest.

No significant difference was found between professional and non-professional group leaders, concerning the lowering of participants' Discrepancy scores.

Prior to the camping experience, the independent variable of residence and sex interaction indicated a significant difference in self-concept. This difference was not significant on the posttest or the post-posttest.

4-H members had a higher Discrepancy score prior to (pretest), immediately following (posttest), and ten weeks following (post-posttest) the camping experience than the non-4-H club members.

CONCLUSIONS

Professional and non-professional group leaders were equally effective in facilitating improved self-concept in a camping situation designed to enhance self-understanding.

Strickland, Cecil L., et. al. "Nonprofessional Aide in Agriculture: An Evaluation of a Program in Cooperative Extension Education for Small Farm Families," Texas Agricultural Extension Service, Texas A & M University, Prairie View, Texas, 1976. 23 pp. (Report) (KAPPA pp. 30-32)

PROGRAM DESCRIPTION

In the summer of 1968, the director of the Texas Agricultural Extension Service formed a committee of 12 members to develop an Extension program that would accelerate educational assistance to small farm operators (75.9 percent of all farms in Texas, reporting annual sales of less than $10,000 in 1969). Local farmers were employed as program aides in working with farm operators in the lower income level, in this Intensified Farm Planning Program (IFPP).

The objectives of the IFPP were: to expand extension educational assistance to small farm operators who generally were not reached by present programs; to determine the effectiveness of nonprofessionals in working with small farm operators on an intensive basis to effect changes in agricultural production and management practices; to increase agricultural income of participants; to become involved in an educational activity beneficial to the well being of participants; to improve participants' level of family living.

EVALUATION APPROACH/METHOD

The general objectives of the evaluation of the Texas IFPP were to assess the leadership characteristics and procedures of effective program aides in working with small farm operators on an intensive basis to effect change in their income and standard of living,and to provide the county and other cooperative Extension staff with additional information on program aides and participants that could be used to further enhance the successful application of the IFPP. The specific objective related to program impact was: to determine changes in production management, living conditions, and gross farm income of the participants. The evaluation involved comparison of background data and socioeconomic profiles of aides and cooperators (1974) with comparable information from 1970, obtained through questionnaires mailed to county Extension agents and program aides. Second, additional information was solicited from all program aides and a sample of cooperators through the use of a questionnaire administered during the personal interview. Interviewers were recruited and trained by the evaluation team and IFPP specialists.

Program aides' questionnaires obtained data on attitudes toward the program, overall performance of cooperators, recruitment methods for new members, innovations or new techniques used, and suggestions for program improvement. Cooperator questions reflected leadership of aides, their degree of influence or involvement in change in activities and procedures of cooperators, and suggestions for program improvement.

The subjects in this evaluation included all 17 program aides and a random sample of approximately 60 percent of the cooperators from each county, 220 of the 360 enrolled.

FINDINGS

KASA (knowledge, attitudes, skills, and aspirations)

Two hundred eighteen, or 99.1 percent of the participants, felt the program had helped to increase their knowledge of modern production and management practices.

Practices

(1) There was an average increase of 34.1 percent of participants following four of the nine recommended livestock production practices in 1974 as compared to 1970.

(2) When considering the adoption of all nine livestock practices, more than 70.0 percent of the participants had adopted practice 4, "following external parasite control." More than 60.0 percent had adopted practices 1, 3, and 6: "using recommended bull," "following recommended vaccination" and "improving feeding practices," respectively.

(3) The aide's involvement in the adoption of practices lies in the areas of "giving information (through literature) on production management and explaining information." Data showed that the aide had some influence in making changes relative to all of the nine practices in livestock production management.

(4) There was an average increase of 5.1 percent of cooperators following recommended crop production practices of "variety planted, fertilizer application, and weed control." The percentage of participants following recommended "land preparation and seed planting rate" decreased an average of 2.5 percent.

(5) A relatively small percentage of the cooperators indicated they had adopted the practice of "keeping records."

End Results

Considerable changes were made in living conditions; between 40 percent and 70 percent of the participants indicated the aide had some influence on such improvements as buying a new TV or radio, repairing or remodeling their home, and piping water into the house.

Other results reflect the changes in gross farm income from the sale of livestock and livestock products and from the sale of crops. The participants' average farm income from sale of crops increased by $478 from 1970 to 1974, or nearly 44.0 percent per participant. The average income from sale of livestock and livestock products increased $53 or approximately 4.0 percent per participant.

Other Program Related Findings

More than 72.0 percent of the participants in the program grossed less than $5,000 in 1974 from their farming operation; 4.1 percent of the participants' gross farm income was between $5,000 and $9,999; 2.3

percent reported gross income of $10,000 or more; and 21.3 percent of the participants did not report their income. Two hundred twelve (96.4 percent) felt the program should be continued and expanded, indicating a positive attitude toward the program.

CONCLUSIONS

The conclusions drawn in the report from the data of the study dealt with leadership characteristics and procedures of program aides and with factors needed for enhancing future programs for small-farm operators. There were no conclusions relevant to the program impact findings.

Texas Agricultural Extension Service. "A Comparative Housing and Management Extension Education Program with Limited-to-Moderate-Income Single Unit Homeowners." Texas A & M University, College Station, Texas, 1974 73 pp. (Report) (KAPPA, pp. 62-64)

PROGRAM DESCRIPTION

The program called "You Can Do It" included dissemination of home care and maintenance information in the form of a 13-program TV series, special interest meetings, a "fix-it" institute, a letter series, and a series of 30 "how to" publications. The goal was to help limited-to-moderate-income families acquire and apply knowledge and skills in home care and maintenance and to develop teaching materials, methods, and procedures to accomplish this. Skills taught included repair of faucets and electrical switches, use of caulking, and making of storage devices. The various modes of preparation, all independent, were under the direction of extension specialists (housing and management) and program assistants. Participants were recruited through flyers, home visits, and special mailing lists, e.g., HUD Title 235 and Farmers Home Administration lists. All were low-to-moderate-income single unit homeowners in Smith County, Texas (City of Tyler).

EVALUATION APPROACH/METHOD

The purpose of the evaluation was to measure changes in selected home care knowledge and maintenance practices after participation in any aspect of the program. For special interest meetings, there was a pre- and post-test on knowledge acquired. For all other program delivery modes, a post-test only questionnaire on application and knowledge and skills was used. Participants were asked if they had performed any program task which they did not know how to do before the program. Interviews were conducted on a stratified random sample of 400 TV program viewers, and mail questionnaires provided data for evaluation of special interest meetings, the letter series, and the "fix-it" institute. Pre- and post-test data were gathered at meetings and were available for participants attending the last special interest meeting, and mail questionnaires were sent to all participants of the meetings, the letter series, and the institute. Matched sets of pre- and post-test data were available for 79 of the total of 241 participants attending at least one special interest meeting. Percent return of mail questionnaires was: special interest, 39.4 percent of 241; letter series, 15.1 percent of 615; institute, 27.7 percent of 455 participants.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

For the special interest meetings, post-test knowledge scores at the conclusion of the series of meetings were 55 to 81 percent correct as opposed to pretest scores of less than 50 percent correct for the 79 participants on whom pre- and post-test data were available. Questions concerned electrical repair, cleaning knowledge, plumbing repair, and knowledge of painting techniques.

Practices

A mean gain of four percent in home repair task performance was reported by the 400 TV series interviewees; i.e., people who reported performing the specific repair only after seeing the TV demonstration. Returned questionnaires of special interest participants (N=95) reported a mean gain on the same measure of 60 percent. Mean letter series participant (N=93) task performance reported gain was 21 percent, and "fix-it" institute mean reported gain was 28 percent for the 126 participants. Tasks included painting, caulking, making of home care products, plumbing, and electrical repairs.

End Results

Participants estimated total savings as a result of performing the repairs learned in the program as follows: TV series (N=400), total savings of $773.10; special interest meetings (N=95), savings of $3,272.23; letter series, (N=93), $1,972.37; institute (N=126) $2,952.35.

Other Program Related Findings

TV and letter series respondents rated the "You Can Do It" publications according to degree of helpfulness, and 50 percent or more of the publications were rated as being of "much help."

CONCLUSIONS

The author concluded that a large number of people can acquire knowledge and skills through TV and apply those skills. The reported audience for the TV series was 12,000. A four percent gain in task performance projected to the entire audience would yield an overall number of 480 participants actually performing a task for the first time after seeing it demonstrated. The other program methods were also described as successful on the basis of gain in reported task performance after participation in the program.

COMPARISON GROUP

Aldrich, Richard J. "Missouri Small Farm Program: An Evaluation with a Control Group," Missouri Agricultural Experiment Station, University of Missouri, Columbia, Missouri, 1975. 26 pp. (Report) (KAPPA pp. 4-6)

PROGRAM DESCRIPTION

A pilot educational program, "Small Farm Program," was initiated in Missouri in 1971; nonprofessional educational assistants helped farmers with a gross annual sales of less than $10,000 (71 percent of Missouri farms) to increase their farm income. The goal was to increase the quantity of output, gross sales, and net income from small farms. The education assistants (local farmers) worked directly with small farm operators under the leadership of area management specialists. Other extension specialists were called on for special training and consultant work with the assistants.

EVALUATION APPROACH/METHOD

The specific objectives of the study were as follows: (1) to determine if the program had resulted in an improved quality of living as reflected by improvements in housing; (2) to assess the extent to which participant farms are approaching optimums in terms of enterprise selection, size of enterprise, and level of sales; (3) to determine the extent to which the program had influenced size of enterprise; (4) to compare resource utilization and production practices on farms of participants and nonparticipants; (5) to identify credit sources used by operators of small farms and determine if the program had affected their ability to obtain credit; (6) to determine whether the program had contributed to stabilization of enterprise selection and production levels on small farms; and (7) to see what effect the program has had on sources of information used by operators of small farms.

Before-program and after-program surveys relevant to the above objectives were conducted with a sample of program participants and nonparticipants. Prior to launching the pilot project, a questionnaire about farm size, types of enterprises, sources of credit, housing changes, sources of information, gross income, expenses, and net income was designed. In 1974, a second, similar questionnaire was used to measure changes made by both participants and nonparticipants. Questionnaires (self-report data) were completed by personal interview. Of the 173 program participants, 63 were selected and 61 interviewed. Of a total of 175 nonparticipants meeting the same age and income criteria, 55 were selected and 45 interviewed as a comparison group.

FINDINGS

Practices

The total number of acres of cropland as a percent of total land operated was calculated for each farm and compared with an optimum figure set by farm management specialists at 65 to 70 percent for the counties studied. Both participants and nonparticipants increased from approximately 35 percent in 1971 to better than 55

percent by 1974; however, there was a change in relative percentages of approximately five percent suggesting that participants have made slightly more progress in improving the utilization of their land resources during this period.

There is an undesirable tendency of farmers to get into a particular enterprise when prices are high and drop out when prices fall. During the course of the program, participants showed a greater stability of agricultural production than nonparticipants and thus, it would appear that the program has reduced the tendency for participants to move in and out of production to the extent present on most small farms. One example is that nonparticipants reduced their livestock numbers much more sharply than participants; the number of beef and dairy cows on participant farms remained almost constant in 1974 while there was a considerable reduction on nonparticipant farms.

End Results

Figures for average farm sales for participants and nonparticipants, respectively were: 1971 -- $2714, $2705; 1973 -- $6240, $3896; 1974 --$5140,$2311. These figures show that although both groups were approximately equal in 1971 and both were affected by agricultural price levels and other outside factors, participant average farm sales were much greater than those of nonparticipants in 1973 and 1974.

Net farm income for both groups was also estimated for participants and nonparticipants respectively as follows: 1971 -- $726, $655; 1973 -- $2469, $1350; 1974 -- $1513, $625. Greater increases are indicated for participants in net farm income in both 1973 and 1974.

With respect to size of enterprise for the south Missouri farms, increases were generally reported for both participants and nonparticipants, with the participant increases being greater. An example is in the number of beef cows, which for participants increased from an average of 16.6 in 1971 to an average of 18.2 in 1974 while nonparticipants were increasing from 11.9 to 16.0 beef cows. In Putnam County, which was separated from the other subject counties for this part of the analysis because of the difference in nature of the farms, gains in size of enterprise for both groups in 1973 were approximately the same, while in 1974, participants' farms showed somewhat larger increases.

Other Program Related Findings

Participants reporting Extension as an important source of information increased from 22 in 1971 to 44 in 1974. Nonparticipants mentioning Extension as an important source of information decreased from 15 in 1971 to 12 in 1974.

CONCLUSION

Participants had higher farm sales, higher net farm income, larger enterprises, more livestock assets, slightly more efficient resource utilization, more professional assistance and information, more changes in housing and more stability in level of production. Evidence was not conclusive with respect to relative changes in production practices nor was it obvious that participants had accomplished more of their goals in terms of planned changes than nonparticipants. However, they were still far short of optimum in terms of farm sales or size of enterprise.

Alexander, F.D., and James W. Longest. "Evaluation Of the Farm Management Phase of the Farm and Home Management Program in New York State." Extension Study #1, New York State Extension Service, Cornell University, 1962. (SMC, pp. 1-3)

PROGRAM DESCRIPTION

The Farm and Home Management Program was established in New York State in 1954 to: increase knowledge of improved farm management practices such as record-keeping methods and efficient use of labor and capital resources; encourage the adoption of farm management practices, including practices related to production, record-keeping, resource utilization, and budgeting, etc; increase farm labor income and improve other related business factors.

The educational methods used in conducting the program included farm and home visits, seasonal letters and cards, group meetings, college publications, tours, and farm walks. Training schools were also used for intensive teaching of specific management practices. The program was conducted in 32 counties in New York state, primarily by Extension Service county agents with supplementary input from area specialists.

EVALUATION APPROACH/METHOD

The longitudinal evaluation objecti es are: (1) to describe the farm management phase of the Farm and Home Management Program, including cost-benefit considerations, and (2) to compare changes of participants in farm practices and related knowledge and in labor income and related farm business factors in the farm management phase of the program with those of a comparison group of nonparticipants.

A modified random sample of 25 participants in the program was chosen in each of six selected counties, and all participants (25) in each of four other selected counties were chosen for study in 1956. In six of the ten counties, the 25 participants were matched with 25 nonparticipants. The matching was done by the county agent on the basis of nine variables, including age, tenure, existence of a partnership, nature of major and secondary farm enterprises, number of milk cows, full or part-time operators, quality of soils on farm (opinion of agricultural agents) and managerial ability of operator (rated by agents). The initial survey thus contained 150 participants, 150 pair-matched nonparticipants, and 100 participants in four other counties. Detailed criteria are also provided for the selection of the counties.

The source of the names of the participants and nonparticipants is not provided. The data were collected through personal interviews in 1956 by trained interviewers using a farm operator's schedule, and Cornell Labor Income Blank #40 for recording farm business data. The author states that the farm operator's and homemaker's schedules used in the terminal survey contained the same questions used in the initial survey. The questionnaires are not provided.

Attrition reduced the number of participants available for the analysis to 204, and the number of nonparticipants to 107. This obviated the utilization of the original matching scheme; new matches were constructed

out of the remaining pool. Pair-matching was based on variables collected in the original survey and resulted in the matching of 87 participants and 87 nonparticipants. The participants were tested by a t-test of significance for their relationship to the remaining 163 of the original sample, and were found to have poor resemblance to the original sample of participants. The author emphasizes that findings on the 87 matched pairs are limited and should be interpreted as indicative of the influence of the program.

Data showing evidence of changes in management knowledge and practices, and in income and related business factors, were presented and tested with the t-test of significance.

FINDINGS

All of the study findings were related to the farm phase of the Farm and Home Management Program.

KASA (knowledge, attitudes, skills, aspirations)

Out of 16 items classified as farm management knowledge, only on two did participants significantly surpass the nonparticipants with respect to change in mean scores between 1956 and 1960. These two items are the operator's evaluation of efficient use of labor and the use of increase in inventory in figuring labor income.

Practice

Out of nine items categorized as farm management practices, participants scored significantly higher on three: (1) the actual size of operation, (2) the actual efficient use of labor, and (3) the actual efficient use of capital.

End Results

Significant differences were not found at the .05 level between the mean increases in net farm income of participants (increase of $2,284) and nonparticipants (increase of $2,028). Differences in labor income per operator were also not significant at .05 level between participants ($1,845) and nonparticipants ($1,409).

The difference in the change in the cow herd size was favored to participants (mean of 5, versus 4 for nonparticipants) but not significant.

The number of work units per man increased significantly more for participants (mean of +25) than for nonparticipants (mean of -2), indicating greater labor efficiency.

CONCLUSIONS

The author concludes from the findings that the program had a favorable influence on the participants.

Boone, Edgar J. and Estelle White. "The Effect of Extension Service Youth Nutrition Lesson Series on Behavioral Change in EFNEP Youth Utilizing Different Educational Environments and Teachers. An Evaluation Study of the Use and Effectiveness of a Lesson Series Developed by Extension Service, USDA for EFNEP Youth (Ages 8 - 12 Years)," Agricultural Extension Service, North Carolina State University, Raleigh, North Carolina, 1976. 167 pp. (Report) plus "Executive Summary," 36 pp. (KAPPA pp. 152-156)

PROGRAM DESCRIPTION

The federal USDA's Expanded Food and Nutrition Education Program (EFNEP) sponsored this experimental study of a Youth Nutrition Lesson Series. The series was developed in 1972 by the Home Economics Division of the Extension Service, USDA.

The goal of EFNEP was to help families, "especially those with young children living in poverty or near poverty to acquire knowledge, skills, and change behavior necessary to achieve adequate diets in normal nutrition." The goal of the Youth Nutrition Lesson Series was the same, but the immediate target population was disadvantaged youth, ages 8 through 12 years.

The delivery mode of this program was EFNEP youth groups which conducted nutrition-related activities. These groups were established by volunteers with assistance from aides and professionals.

EVALUATION APPROACH/METHOD

"The effective implementation of such a program required nutrition education materials that would be integrated and properly sequenced, using instructional strategies and methods suitable for low-income youth, ages 8 through 12." Thus the major purposes of the study were to determine the impact of the lesson series, and to find out which factors determined the educational outcomes.

There were three general outcomes: knowledge change, attitude change, and behavior change. The domain for knowledge consisted of the topics of the lessons in the Youth Nutrition Lesson Series, and included: "(1) Super Snacks, (2) Mighty Milk, (3) Vitamin C for You and Me, (4) Meet the Meat Group, (5) Bring in Breads and Cereals, (6) Eat Your Way to Vitamin A, (7) Milky Ways, (8) Meat and More, (9) Amazing Ways with Grains, and (10) Get It All Together." The evaluation was limited to the effectiveness of each of the first six topics. A test battery was constructed by the study and considered of questions with multiple pictorial responses.

The domain for attitude is not described within the study but reference is made to "self-concept and school attitude items." Inspection of the questionnaire confirms that attitudes toward self and school are sought and not attitudes toward nutrition. However, within the section entitled, "Results-Nutrition Behavior Change," specific reference is made to "nutrition attitude change" and scores for such a measure are reported.

The domain for behavior is specifically stated in the text as a 24-hour food intake inventory, although how it is scored is not mentioned. The instrument provides cross-classification categories of eating period and food groups (milk, meat, vegetable/fruit, and bread/cereal). Some items in the attitude questionnaire could be interpreted as behavioral, such as "I usually eat the morning meal, "I usually eat the noon meal," etc.

A total of 22 factors or independent variables were analyzed and tested for an association with a measure that was a composite of the three outcome measures (called "the combined nutrition behavior change score"). The 22 variables were classified by their three major categories: teacher-related; teaching/learning environment; and learner-related.

The study was a semicontrolled field experiment using two subgroups for the experimental group and one control group. The two subgroups were: Group I (N=492) "were taught in small groups by a volunteer or aide in an informal, Extension type setting." "Kitchen facilities were available whenever possible." "Group II (N=399) were taught by volunteers, aides or classroom teachers in classrooms, housing projects, or other organized community group settings." "Although recommended, food preparation activities were not always possible...." The size of the control group was 477. All groups were pre- and post-tested so as to obtain change scores.

The target population for the study was confined to youth who were eligible for the 4-H Youth phase of EFNEP. Eligible youth were defined as: 4-H age, low-income disadvantaged youth primarily in depressed city areas.

A total of 1,368 youth participated in the study from both rural and urban areas in the states of Minnesota, North Crolina, Oklahoma, and Vermont having the above characteristics. (The study fails to mention exactly how groups of children were selected.)

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

For the knowledge test, Group I (Extension setting) "was significantly different for all six topics (snacks, milk, Vitamin C, meat, breads and cereals, and Vitamin A) and summary" for differences between mean pretest/post-test scores. "Compared to Group I, the change in Group II (school setting) was less, but was significant for all topics . . ." except one (snacks). The control group was significant on only one (breads and cereals). All three groups of youth showed a significant change in attitude ("self-concept and school attitude items"), all in the positive direction. These data were also presented by state for which there was considerable variation. The mean scores for pre- and post-tests on knowledge and attitude, by experimental and control groups, are presented below.

Mean Scores for Pre- and Post-Tests on Knowledge and Attitude
by Experimental and Control Groups

		Knowledge Mean Score		Attitude Mean Score	
Group	N	Pre	Post	Pre	Post
I (Extension	492	15.19*	22.14	15.16*	16.38
II (School)	399	15.82*	18.64	14.98*	15.78
Control	477	15.72	15.59	15.15*	15.72

*Statistically significant at .05 level.

Practices

Mean Scores for Pre- and Post-Test on Behavior
by Experimental and Control Groups

		Behavior Mean Score	
Group	N	Pre	Post
I Extension	492	3.72	3.82
II (School)	399	3.68	3.81
Control	477	3.94	3.57

*Significance level set at .05.

"The only significant change in food intake in either group occurred in Minnesota Groups I (Extension Setting) and Group II (School Setting)." "Changes among the control groups were slight, and were negative for all states except North Carolina."

Other Program Related Findings

For each of the 22 independent variables the "combined nutrition-behavior scores" were presented for the two experimental groups and as a combined group by each of the four states and for the total of the four states. The authors described and contrasted the various combinations of comparisons, and stated whether or not there was an association, although it was not clear whether they meant statistically significant association. The 22 variables are (a "+" indicates an association):

Teacher	Teaching/Learning Environment	Learner
Teacher's sex	+Group size	Sex
Teacher's age	+Teaching/learning setting (ext./school)	Age
+Teacher's educational level	+Lesson time frame	Grade in school
Teacher's income level	+Lesson frequency	Place of residence (rural/urban)

(continued on next page)

Teacher	Teaching/Learning Environment	Learner
+Teacher's socio-economic status	Teaching strategies	School food program participation
+Type of teacher (volunteer, aide, classroom)		+Family income
		Number of children in family
		+Age of homemaker
		Educational level of head of household
		Occupation of head of household
		Participation of homemaker in EFNEP

CONCLUSIONS

The selected sociocultural characteristics of the youth and their families appeared to have little effect upon the degree of nutrition behavior change that occurred in the study.

Green, Lawrence W., Virginia Li Wang, and Paul H. Ephross. "A Three-Year, Longitudinal Study of the Impact of Nutrition Aides on the Knowledge, Attitudes and Practices of Rural Poor Homemakers." Cooperative Extension Service, University of Maryland, 1972. (SMC pp. 164-65)

PROGRAM DESCRIPTION

The Expanded Food and Nutrition Education Program (EFNEP) is concerned with the improvement in dietary and health care practices among rural poor homemakers. The intended outcomes include: increased knowledge of good nutritional practices and recognition of their importance; increased knowledge of available health care resources; the adoption of balanced nutritional practices; the utilization of available health care resources; a change of dietary habits; and the improvement in health among the rural poor through better nutrition and health care practices.

The clientele contact in EFNEP is performed by indigenous aides. The nature of the contact and activities of these aides in relation to the clients is not specified in this report.

EVALUATION APPROACH/METHOD

The purpose of this study is to supplement earlier evaluations of EFNEP by examining: (1) appropriate criteria and standards of comparison; (2) the point of diminishing returns in continuing visits to homemakers; and (3) the broader impact of the program in selected health variables.

There were two experimental and two control groups in the study. The experimental groups were derived from a 50% random sample of EFNEP homemakers in two rural counties, one Appalachian and primarily white, the other on the Eastern shore of Maryland and primarily black. One experimental group consisted of 49 EFNEP homemakers still being visited by aides after three years in the program. The other experimental group consisted of 44 homemakers who had progressed out of the program after the end of their second year. The control groups consisted of 34 designated friends of the first experimental group and 24 friends of the second experimental group.

The data were collected during three sets of interviews conducted in the homes by trained persons unrelated to the program. The homemakers were interviewed in 1970, 1971, and 1972. Data collected included personal characteristics and attitudes of the homemakers, ratings of adequacy of meals prepared, and indicators of adequate referral for preventative health practices. The data were summarized in tabular form to facilitate comparison between the experimental and control groups.

FINDINGS

Practices

There was an increase in the purchase of new foods between the first and second year of program participation, but by the end of the third year this had declined.

The frequency of buying new foods learned from the aide declines after the second year of program participation.

There was a steady increase in the proportion of continued homemakers mentioning combinations of more than one food group.

The frequency of preparing foods by new recipes declines radically in the third year for continued homemakers.

There was little or no improvement in health care referrals for the second year of the program.

Although most of the homemakers and friends had "a regular place to go" when they were sick (60-90%), only 25% of the continued homemakers indicated that they used a clinic, hospital, or other public source of care.

End Results

Second year participants in EFNEP were more likely to state that "things are getting better" for them than either first or third year participants (47% said "things are getting better" in first year, 58% in second, 53% in the third year).

Continuing participants in EFNEP were more likely to find that "things were getting better" for them than terminated homemakers; 34% of those who had been progressed out of the program saw things as getting better.

CONCLUSIONS

The authors conclude that the point of diminishing returns in the EFNEP Program was reached after two years and that continuing the program for a third year was not beneficial.

Gruenhagen, R.H. "The Effect of a Planned Communication Program on Change Of Attitude and Knowledge of the Urban Dweller Toward Chemicals And Pesticides," Virginia Polytechnic Institute, 1969. (SMC pp. 78-79)

PROGRAM DESCRIPTION

The program dealt with in this study was an urban educational pilot project on the use and regulation of pesticides. The intended outcomes included: a change in attitudes of the urban middle class toward pesticides, and an increase in knowledge of the urban middle class about pesticides.

The project was a joint effort between personnel from the Chemical, Drug, and Pesticide Unit at Virginia Polytechnic Institute and the Extension News Editor, Publications Editor, TV Supervisor, and Extension Specialists in Entomology, Plant Pathology, Physiology, and Veterinary Science. The program made use of spot announcements and special programs on radio and television, a newspaper article, and an Extension Service pamphlet to reach the general public. The project was conducted from August 26 to September 2, 1966, following a well-defined theme. Three stations serving the Richmond, Virginia, study area broadcast spot announcements running from 20 to 60 seconds. Each station used the spots 30 times as between-programs or station break announcements.

EVALUATION APPROACH/METHOD

The purpose of this study was to determine the effectiveness of a planned Extension communications program in bringing about a change in attitude toward and knowledge of pesticides and chemicals on the part of the selected audience.

Study groups were drawn from Richmond and Roanoke, Virginia, with Roanoke serving as the control. The 1960 census tracts, supplemented by related area information provided by Extension agents, were used to determine areas of middle and upper-middle-income dwellers. A statistical consultant set up random sampling within the limitations that interviewees live in unattached, single-unit dwellings, and that an equal number of male and female household members be included. Samples were drawn to yield 600 "before" and 600 "after" questionnaires in Richmond, and 200 "before" and 200 "after" questionnaires in Roanoke. In each city, 50 post-treatment samples were second interviews; i.e., were individuals who had been interviewed in the pre-treatment group. The final count was 600 valid "before" and 597 "after" questionnaires in Richmond, and 201 valid "before" and 213 valid "after" questionnaires in Roanoke.

The interviews were conducted by a professional consulting firm. The questions consisted of knowledge measures and attitude gauges regarding pesticides and pesticides regulation.

Specifically, the knowledge questions dealt with general (buying, using, and storing pesticides) knowledge, as well as "government knowledge" (regulations and legislation concerning pesticides). Likert-type attitude questions dealt with "general views" (on the role of pesticides)

and views on government regulations and legislation regarding pesticides. For example, the data were analyzed using a computer and Likert's International Scale was used in assigning numerical values to each response. The significance of difference between percentages was determined through the use of Davies' test and the Chi-square test was used as was a student "t" test.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

There were no significant differences in pesticide knowledge and attitude levels in the two urban samples, i.e., Richmond and Roanoke, before the mass media program.

The total Roanoke (control) group was found to have a statistically higher level of general pesticide knowledge in the post-program interviews. Control area respondents averaged 3.78 and program area respondents 3.53 out of a possible score of 7.5.

There was no statistically significant difference in the Richmond and Roanoke samples in the post-test relative to government knowledge, general attitude and attitude toward government regulations.

There was no significant change in the re-interview group of either the control or experimental group after the treatment.

The total Roanoke (control) group was found to have a significantly higher level of general knowledge in the post-treatment interviews.

The Richmond (experimental) group did not change significantly in pesticide knowledge or attitude after the experimental treatment.

The 103 respondents reached by TV had a significantly higher "government knowledge" score than did the 494 who were not reached. Scores for general knowledge, general attitude, and government attitude remained unchanged.

Other Program Related Findings

The communications reached 140 people of the total sample (23.4%).

Of the media used in the program, television reached 17.25% of the sample, radio 4.02%, newspaper 7.27%, and the Extension publication 15.76%.

Pesticide use was not dependent on age or on place of early residence.

Pesticide use was related to educational attainment. There were significantly more non-users in the group that had not completed high school.

CONCLUSIONS

The experimental program did not produce the desired changes in knowledge and attitude of a middle and upper-middle class urban audience regarding pesticides.

Mauk, Warren S. "The Galveston County 4-H Youth Development Project," Agricultural Extension Service, Texas A & M University, College Station, Texas, May 1975. 21 pp. (Report) (KAPPA pp. 125-127)

PROGRAM DESCRIPTION

The Galveston County Youth Development Project was funded by the Moody Foundation for a two-year period to test a specialized 4-H program for disadvantaged, low-income youth. The author described disadvantaged as "a population ... having in common: (1) a low economic status; (2) a low social status; (3) low educational achievement; (4) tenuous or no employment; (5) limited participation in community organizations; and (6) limited ready potential for upward mobility. The children referred to as "disadvantaged" are predominantly Negro and Mexican-American. The program structure provided activities involving psychomotor, cognitive, and affective dimensions of behavior. Activities were individual and/or group planned and implemented to provide experiences in planning and decision-making. Emphasis was placed on utilizing the democratic processes. Activities were conducted by trained volunteer adult leaders who worked with youth individually and in small groups and included work in a specific project area such as in vegetable gardening, foods, or clothing. The objective of the program was to increase the personal competence and the self-esteem of the participants. The essence of the program was a "performance contract" agreed upon and signed by the youth and the youth leader, also involving the use of rewards.

EVALUATION APPROACH/METHOD

The major objective of the study was to determine the impact of the program. A secondary objective was to determine which of two types of rewards was more effective: (1) payment in the form of gift certificates that the youth could exchange for items of value, versus (2) symbolic rewards in the form of certificates, pins, and ribbons.

In order to determine the effect of the two types of rewards, two experimental groups were established: one in Texas City and the other in Galveston. An intact school classroom was used as a control group. (There was no mention of the size of these groups nor a quantitative description of their characteristics. Also, there was no mention as to how these groups were selected other than that they were to serve as experimental and control groups.)

All groups were pre- and post-tested with two instruments that yielded scores on two constructs, feelings of competence and self-esteem. Competence was described as "personal competence" or a feeling of "I can do." The instrument was composed of four items with two responses that reflected opposite feelings. For example, the first question was, "Are you the kind of person that plans his life ahead all the time or do you live more from day to day?" The responses were, "plan ahead" and "live from day to day." The self-esteem instrument was composed of fifteen statements to which the respondent indicated, "like me" or "unlike me." One of the questions was, for example, "I really don't like being a boy (girl)."

A questionnaire was administered following the program in order to gain the youths' reactions to various methods used. The data were aggregated to form a "happiness index." A fourth questionnaire was completed by the volunteer leaders in pre- and post-test fashion for each member in their 4-H group; this form attempted to measure the "planfulness" of the youth.

FINDINGS

End Results

There were no statistically significant differences among the groups on the pretest for both competence and self-esteem. The mean difference ("net change") for the control group was approximately zero (-0.9) and (-0.6), while the mean differences for the experimental groups were greater than zero -- in fact, significantly different from zero.

Other Program Related Findings

Comparing the two experimental groups, which differed only by the type of rewards given to their members, there was no statistically significant difference on the pretest nor on the mean differences ("net change").

The study reported a correlation between "planfulness" change and member satisfaction with the adult volunteer leader.

The study reports that "Figure 4 gives correlations between pairs of variables within the self-esteem, competence, and planfulness sets. In each case the correlation between the pretest and the net change is minus and highly significant."

"The highest ratings (of the "happiness index") were given to the 'Activities' index indicating that the members were happiest when involved in the 'doing' aspects of the project. The lowest ratings were given to the 'Performance Contract' index which was the most future-oriented and abstract aspect of the project. Even though this rating was the lowest, it was placed 4.2 or higher on a 5-point scale by both groups...."

CONCLUSIONS

With respect to the major objective of the study, that is, to determine whether or not the program had impact, the author stated that "There is good evidence that the procedures used in the project were effective in promoting improvement in feelings of competence...." And, "These results support the research hypothesis and provide evidence that the project's procedures were effective in improving self-esteem."

With respect to the comparison between the two experimental groups, the author stated that: "This finding tends to negate the hypothesis that monetary rewards will promote greater feelings of competence. The conclusion is that, given the methods and procedures used, there is no difference between symbolic rewards (pins, ribbons, certificates, etc.) and monetary rewards (gift certificates) in enhancing feelings of competence. The same statement applies to feelings of self-esteem."

With regard to the correlations among self-esteem, competence, and planfulness sets presented in Figure 4, the author stated that this "... suggests that the project helped those members most who had the lowest pre-test scores..." that is, those most in need compared to others.

The author concluded that even though the rating for the Performance Contract index was the lowest, it placed 4.2 on a 5-point scale "supporting the conclusion that the performance contract was well accepted."

Street, Paul. "What is the Impact of the Indigenous Paraprofessional Community Developer? A Report on the Evaluation Phase of the Appalachian Community Impact Project of the Cooperative Extension Service, University of Kentucky," Bureau of School Service, Lexington, Kentucky, 1973. 118 pp. (Report) (KAPPA pp. 104-106)

PROGRAM DESCRIPTION

The Appalachian Community Impact Project (ACIP) was designed to demonstrate methods of improving conditions of life in selected "pockets of poverty" in eastern Kentucky by employing locally-oriented persons as community aides to work with the local residents in community development efforts. Specifically, the Extension Service of the University of Kentucky proposed to:(1) develop a set of recommended ways of working with similar target groups throughout Appalachia; (2) define as distinctly as possible the roles of community contacts/aides and the roles of professionals in community development to determine how the roles of these two groups can complement each other; and (3) determine the feasibility of permanently staffing such projects with subprofessionals in the Extension Service continuing education programs.

Three counties containing "pockets" of Appalachian poverty selected to be representative of both coal mining and subsistence farming cultures in eastern Kentucky were assigned two locally recruited paraprofessional community organizers specially trained as change agents. Their function was to stimulate community involvement and activity for the purpose of increasing the quality of life in the various communities.

Each aide/contact was assigned to work in three communities (hollows) of 30 to 70 families each. The professional Extension staff acted as "coaches" to the contacts as well as resources for them. The basic emphasis was on having the community contacts serve to stimulate, but not manage, community development programs.

The project was initiated in the spring of 1969 with a supporting grant from Federal Extension Service and continued for three years.

EVALUATION APPROACH/METHOD

A longitudinal impact design was utilized with populations "constructed" for the purpose of the study to represent Appalachian poverty. Eighteen experimental communities were identified with the six community contacts being assigned three each of these communities for intensive community development work. Comparison communities were selected by Cooperative Extension Service staff.

The theoretical assumptions of the study were that community development is an effective way of improving life because as people intensify their social participation, they will come to share in, as well as support, an improved lifestyle for all.

A 50 percent sampling of alternating male and female heads of households in the 18 experimental communities was compared to a similar sample from the comparison communities. Two age groups -- adults and youth -- were identified in each sample. The premeasurements were taken in the spring of 1969 and the postmeasurements in the spring of 1972. Significance of differences was statistically verified. Variables used were identified as measuring change in such areas as mobility, sociolization, educational aspiration, alienation, and modernity.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

Attitudes among adults showed that community loyalty increased and the life of women became more sociable at significant levels in the experimental communities.

The fact that "modernity" scores for women in the experimental communities went up significantly, while they went down significantly for their counterparts in the comparison communities provides a clear contrast between the experimental and comparison communities after the treatment.

Youth in the experimental communities showed significant increase in political sophistication, more selectivity in the activities they would and would not participate in, higher pay expectation, and a lower aspiration for schooling.

End Results

Substantive change in living-level items for adults (such as family income, increased numbers of homes with plumbing, and increased home ownership) did occur at significant levels more often in the experimental communities.

Alienation was measured as having significantly risen for the men of the comparison communities (and risen also, though not significantly, for the comparison group women); by contrast, although it did not decline significantly, alienation did decline instead of rise in the experimental communities.

CONCLUSIONS

The study concludes that some changes did occur in the experimental communities. In all it appears that the householders of the project area now live by a higher standard, are happier with their neighborhoods and their neighbors -- less likely to leave their communities, are more ready to adopt the new, and are more confident in their neighborhood's self-sufficiency.

Subaima, G. V. "A Comparative Study Among 4-H Girls of Four Years and Over, One and Two-Year 4-H Dropouts and Non-4-H Girls of Ninth Grade, in Ten Selected Communities of Wisconsin, to Determine Differences in School Achievement and Social Behavior." "Doctoral Dissertation, The University of Wisconsin, 1961 (SMC pp.235-236)

PROGRAM DESCRIPTION

Authorities on 4-H have asserted that, while it in no sense replaces school work, it promotes scholarship in the classroom, and that 4-H members include more superior students than those not in 4-H. Similarly, it has been said that 4-H develops youth into self-reliant, well-behaved, responsible citizens. A central element of 4-H is project work, around which many learning experiences are developed. Experience derived from projects is thought to foster desirable traits of character and responsible citizenship.

Previous studies have been contradictory as to whether 4-H membership increases school achievement and desirable personal and social behavior.

This study is designed to determine if 4-H participation, family background, intelligence, or all of them as a whole, distinguish 4-H members from other students.

EVALUATION APPROACH/METHOD

This study is a part of a Longitudinal Study of Ten Selected Wisconsin Communities. From the longitudinal study sample of 383 ninth grade girls from the ten community schools, three subsamples were chosen: those who had 4-H experience over four years; those who dropped out of 4-H after one and two years; and those who had never been 4-H girls. Each subsample had 23 girls. As 23 girls had dropped out of 4-H after one-to-two years, the other subsamples were made to equivalent size.

The tests used to estimate school achievement were: (1) the Metropolitan Achievement Test, including measures of reading, vocabulary, arithmetic, English and social studies; (2) sixth grade teacher questionnaire; and (3) Kuhlmann-Anderson Test of mental ability (age). Social behavior was measured by: (1) components from the teacher questionnaire (e.g., social qualities, emotional stability and willingness to work); (2) a Personal and Social Behavior Inventory (including feeling of belonging, and sense of worth); and (3) an Interest Record.

Two null hypotheses were developed stating that there would be no difference in school achievement and social behavior between the three groups.

The data were treated by analysis of variance followed by Tukeys "W", where the "F" value was significant.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

On total achievement on the Metropolitan Achievement Test, the 4-H (participation of four years and over) girls averaged 365.7, the

4-H drop outs (of one to two years participation) averaged 347.1, and the non-4-H girls averaged 341.1. These differences were not statistically significant at the five percent level.

On mental age, the four year 4-H members and non-4-H members showed statistically significant differences, while the difference in chronological age of the three groups is not significant.

End Results

The range of mean scores on sense of personal worth was small (not significant statistically) over the three groups, although 4-H had the highest mean, followed by 4-H drop outs and finally non-4-H'ers The same was true for the variable "feeling of belonging," where the means were: four-year 4-H -- 11.35; 4-H drop outs after one to two years -- 10.91; and non-4-H -- 10.75.

Teachers rated the four-year 4-H girls slightly superior to the other two groups in social qualities, but the F value is not significant.

Teachers rated girls' willingness to work with 4-H (four year) highest, 4-H (one to two year) second, and non-4-H lowest. The F value was not significant.

Means scores on emotional stability were very close to each other, with four-year 4-H girls' average score occupying the top rank.

Other Program Related Findings

Teachers rated the four-year 4-H group to have the most favorable family background, and the one to two-year drop out group to have better backgrounds than the non-4-H girls.

CONCLUSION

The principal conclusion from this study is that it did not reveal significant differences in school achievement and social behavior among the ninth grade girls who had been 4-H members over four years, 4-H drop outs after one to two years' experience, and those who had never been 4-H members. However, the four-year 4-H girls' nearly constant superiority on the mean scores of the 23 variables of school achievement, mental ability and social behavior was "rather impressive."

Field Experiment

Bowering, Jean, et al. "Influence of a Nutrition Education Program (EFNEP) on Infant Nutrition in East Harlem," Journal of the American Dietetic Association, April, 1978, Vol. 72, No. 4. 6 pp. (Article) (KAPPA pp. 160-161)

PROGRAM DESCRIPTION

This EFNEP program involved providing nutrition education to homemakers whose infants attended the well-baby clinic at Metropolitan Hospital in East Harlem and in some cases, received home visits from nutrition aides. The purpose of the program was: to improve infant nutrition by encouraging their mothers to feed infants formula rather than whole cow's milk during the first six months of life; develop familiarity with a large number of foods in infants six to 18 months of age; and to prevent iron deficiency anemia by encouraging good food habits and obtaining regular well baby care. Homemakers enrolled in the East Harlem Nutrition Education Program (n=118) with their infants composed this program's participating group who received nutrition counseling on infant feeding over an 18-month period. Nutrition aides visited the homes of the study group component of this group on a regular basis and reinforced the nutritional advice given during the homemakers' clinic visits. Program participants were all low-income persons whose group ethnic composition was 50 percent Puerto Rican, 32 percent black, and 26 other (Haitian or Spanish speaking).

EVALUATION APPROACH/METHOD

The purpose of the evaluation was to assess the families whose infants attended the well-baby clinic, and in some cases received home visits from nutrition aides, to determine if there was any evidence of extra benefit to infants already receiving good medical care. The evaluation design included designating 118 low-income, primarily black and Puerto Rican, homemakers and their infants as members of either a study group (n=57) or a control group (n=61). All 118 families received nutrition education from the clinic nutritionist as part of their well-baby visits. Only the study group was visited in their homes by nutrition aides who reinforced the nutritional advice received at the clinic. Questions to be answered included whether infant nutrition could be improved and whether there was an extra benefit (nutrition improvement) derived from aide visits. Specific areas to be analyzed were: comparison of formula consumption with whole cow's milk consumption, to measure encouragement of formula consumption by the infant's age in months when whole cow's milk became part of the diet; analyze variety scores (one point for each different type of food); and analyze risk of iron deficiency anemia, to be measured by hemoglobin tests done during several clinic visits. Data collection methodology for dietary information was 24-hour recalls by mothers of food their babies had eaten as recorded by the clinical nutritionist. For aide-intervention data, aides kept logs of all visits from which pertinent data were the number of visits when the study group homemaker was at home and the number of visits at which nutrition was discussed.

FINDINGS

Practices

Homemakers visited by aides delayed introduction of cow's milk to infants four to eight months in age in both black and Puerto Rican ethnic groups. This finding demonstrated a trend and wa. not statistically

significant. Analysis of the variety scores for food consumed were consistently higher by one food category in every time period for the study group. These differences were statistically significant for only months 2, 3 and 5 - 7. Also, these results were due to very early introduction of solid foods to infants whose mothers had aides. This was a reflection of aide bias to solid foods and may or may not be positive.

End Results

Seventy percent of study infants were at low risk to anemia while 56 percent of control infants were at low risk.

Other Program Related Findings

There are positive effects from program participation such as involvement in community affairs by the homemakers. Also, these types of grass roots programs are a potential resource for linking health education and health services with broader needs of families, especially where early development of good food habits is concerned.

CONCLUSIONS

Nutrition aides reinforced nutrition education offered by professionals to improve the diets of infants and to reduce their risk of iron deficiency anemia.

Honnold, Robert and Karin Kristiansson, F. Aline Coffey, Barbara Gunn and Emma Yancy. "Cost Effectiveness of Three Nutrition Education Delivery Systems," The Extension Service, University of Vermont, Burlington, Vermont, 50 pp. (Report) 1981 (PDEMS)

PROGRAM DESCRIPTION

The project sought to increase participation of food stamp families in Extension's Expanded Food and Nutrition Education Program (EFNEP) and to compare the cost effectiveness of three alternate delivery methods in reaching and educating rural and urban food stamp families.

Objectives of the project were for recruited program participants to increase: their knowledge and understanding of basic nutrition; their acceptance of recommended meal planning and food shopping practices; their acceptance of recommended nutrition practices including avoidance of excess sugar; and their adequacy of diet in terms of food consumption relative to four food groups.

The main purpose of this Vermont Extension Service--Nevada Extension Service project was to compare the typical EFNEP one-to-one or small-group teaching approach to delivery methods which might reach a greater number of food stamp program participants while helping them to decide to purchase and consume more nutritious food.

The alternate educational delivery methods tested in the two states were: (1) television and direct mail mini-lessons with telephonic instruction by EFNEP paraprofessional aides (135-180 clients per aide); (2) television and direct mail mini-lessons with no contact by EFNEP aides; (3) conventional instruction in one-to-one or small-group situations by EFNEP aides (30 up to 60 clients per aide); and, (4) a control group of food stamp participants with no exposure to the EFNEP program.

Teaching materials produced for the program were comprised of 12 direct mail lessons, 10 TV shows of from 15 to 30 minutes, 12 letters, and two 60-second TV spot announcements.

The program was conducted during a three month period in 1980 with rural food stamp families in Vermont and urban food stamp families in the area of Las Vegas, Nevada. Food stamp recipients who had no previous exposure to EFNEP made up the population of the project audience.

Announcements of opportunity to participate in the nutrition education project were mailed to all food stamp recipients in Vermont and in the Las Vegas, Nevada, area. Each person who mailed back a card (in Vermont, 5,010 persons returned cards and in Nevada, 1,237 persons returned cards) received a letter with information on dates and times of the TV shows and the nutrition lessons that would be mailed to them during the project.

EVALUATION APPROACH/METHOD

Enclosed with the letter from project staff, containing program information, was an evaluation pre-test instrument. In Vermont, 2,903 persons completed and returned the pre-test questionnaire and were thus enrolled

formally into the program. In Nevada, 670 persons returned the pre-tests and were formally enrolled into the program (more than 3,000 children were also included in the program through being in the program families). Participants were randomly assigned to each of the experimental groups.

At the end of the three-month instructional program, participants and control group members completed post-test questionnaires identical to the pre-test questions about nutrition, food preparation and food selection. Changes in food and shopping practices were measured by client's retrospective, self-reported behavior prior to and after their program participation (i.e., these data were collected after the program). Changes in diet were measured by pre- and post-test food consumption recalls. Instruments were screened for sixth to seventh grade readability and examined by low-income makers.

In Vermont, an average of 60 percent of those completing pre-tests also completed post-tests. In Nevada, the comparable percentage was 47.

Among other analyses, the estimated learning effectiveness (LE) was calculated for each educational delivery system. LE values indicate percent shifts by respondents from incorrect answers on the pre-test instrument to correct answers on the post-test.

FINDINGS

KASA (knowledge, attitude, skills, aspiration)

Statistically significant knowledge improvement about nutrition, food selection and food preparation occurred among participants in all three delivery modes. All three delivery modes resulted in significantly more learning than in the control group where the learning effectiveness (LE) score based on pre- and post-test differences was not significant. LE scores for the four delivery modes are as follows: method 1 (TV, mailed lessons and telephonic aide), LE=.41; method 2 (TV and mailed lessons only), LE=.23; method 3 (EFNEP individual or group aide), LE=.61; control group, LE=.12.

Practices

Program participation helped to increase use of recommended shopping and planning practices (e.g., making shopping lists) and nutrition practices (e.g., serving liver, using meat substitutes, and not eating candy and sweets). Significant changes were observed for all three methods.

Measurements, pre-and post, regarding consumption of food within the four food groups, showed several significant improvements for each delivery method but none among the control group. For example, in Vermont, the percentage of clientele consuming four or more servings from the vegetable and fruit group were as follows: Method 1: 15.2% pre and 26.6% post; Method 2: 15.6% pre and 21.7% post; Method 3: 7.5% pre and 18.7% post; control: 7.8% pre and 4.7% post.

Comparisons were also made between the three-month progress by program participants and average progress by EFNEP participants nationally over six and twelve months of participation.

Other Program Related Findings

Costs per program family (participants who completed pre-tests and received all information) were: Method 1: Vermont -- $42.00; Nevada -- $47.00; Method 2: Vermont -- $19.00; Nevada -- $35.00; Method 3: Vermont -- $113.00; Nevada -- $109.00.

Program cost effectiveness (comparing cost per participant with composite performance by participants) showed that Method 2 was most cost-effective. While there was little difference between the number of significant improvements recorded among clientele of each delivery method (except for LE values where Method 3 excelled), Method 3 was more than twice as costly as Method 1 and three to five times as costly as Method 2. Thus, delivery Mode 2 is most cost effective. Delivery Mode 1 proved to be second in cost effectiveness.

CONCLUSIONS

Food stamp participants are willing to participate in Extension education nutrition programs. A well designed and implemented multi-media program can teach nutrition acceptably well to low-income families in both rural and urban settings at a lower cost than one-to-one or small-group methods. Mass media methods have a place in future EFNEP programs, as they greatly decrease the program cost per participant while decreasing only slightly overall improvements in nutritional learning and practices among program participants.

Some combination of all three delivery modes in the study, tailored to participants' motivations, need and educational levels, may be most cost effective in nutrition education.

Scherer, Clifford W. "Differential Knowledge Gain Among Wisconsin Dairymen: A Field Experiment," University of Wisconsin Extension, Madison, Wisconsin, 1977. 36 pp. and attachments (Summary of Thesis) (KAPPA pp.27-30)

PROGRAM DESCRIPTION

A direct mail educational campaign was undertaken by the author in order to communicate to selected dairymen in Wisconsin the importance of subclinical or "hidden" mastitis and the tool, the Somatic Cell Test, currently available to detect the disease. The author conducted the educational effort in order to examine various hypotheses related to the effectiveness of direct mailings in increasing knowledge and to the differential gain of knowledge among different types of farmers. Direct mail techniques are frequently employed by extension programs; the author's research was intended to improve extension educational efforts.

An educational campaign concerning hidden mastitis was directed at dairy farmers in four Wisconsin counties. The educational program had four objectives:

(1) To increase awareness of the problem of hidden mastitis;

(2) To increase knowledge about mastitis (three specific facts were to be communicated);

(3) To increase awareness of early detection systems (specifically, the Somatic Cell Test);

(4) To increase knowledge about the Somatic Cell Test (four facts to be communicated).

Six weekly direct mail pieces were sent to randomly selected farmers during April, May, and June of 1976.

EVALUATION APPROACH/METHOD

The author sought to test three hypotheses relevant to direct mail campaigns as an educational vehicle:

(1) That a direct mail campaign could be effective in increasing knowledge among dairymen;

(2) That members of the Dairy Herd Improvement Association (DHIA; an Extension sponsored association) would generally show more gains in knowledge than nonmembers;

(3) That knowledge gain about a problem's solution would be associated with both exposure to the treatment and knowledge about the problem it is designed to solve;

To test the hypotheses, the author utilized a post-test-only control group design. A random sample of 415 dairymen living in four Wisconsin counties was assigned to either the experimental or the control group. The experimental group received a series of six weekly mailings concerning hidden mastitis. Mailings communicated the information outlined in the objectives of the educational campaign. One week after the final newsletter, personal interviews were conducted with the selected farmers. As the report summarized results of the author's dissertation research, full information concerning the sample procedures, interview techniques, and so on was not provided. In particular, the discrepancy between the 415 farmers identified as the sample and the 342 responses actually analyzed was not explained.

Farmers' knowledge concerning light mastitis issues was examined to test for differential knowledge gain among the experimental group and within the experimental group of farmers who were or were not members of the DHIA.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

Findings in two areas shed light on Extension activities. First, the success of the direct mail technique in increasing knowledge was tested. The author reports that "as a group, those receiving the experimental treatment show significantly higher knowledge and awareness in all eight measured variables" than farmers not exposed to the mailings. The eight variables were awareness of, and knowledge about, the Somatic Cell Test and mastitis, economic loss due to, and prevention of mastitis. Experimental and control group means (tested with the F ratio) showed significantly higher scores for the experimental group in all cases ($p < .005$). Effect of previous Extension efforts were measured through differential knowledge levels of farmers participating in the Extention sponsored DHIA program: "members" knowledge scores were consistently higher than nonmembers for all eight measures.

Other Program Related Findings

The hypothesis that DHIA members would learn more than nonmembers because of their higher levels of education, farm size, and so on, was not supported. The author noted that "in only two of the eight variables was DHIA knowledge gain significantly greater than others." However, though not statistically significant, all changes in knowledge were in the appropriate direction, with exposed DHIA members scoring higher in knowledge than nonexposed members. The author suggested that a ceiling effect may be present with regard to DHIA members' knowledge increases.

The hypothesis that gain in knowledge of a solution was associated with problem knowledge was not clearly supported.

CONCLUSIONS

Based on his findings of knowledge gain subsequent to exposure to a direct mail campaign, the author concludes that Extension agents can expand their audience by mailing to dairymen not previously reached and, by doing so, they can successfully increase such dairymen's knowledge.

Trent, Curtis, and J. Conrad Glass, Jr. "The Development and Evaluation of a Series of Educational Experiences Designed to Effect Changes in Adolescents' Attitudes Toward the Aged." Agricultural Extension Service, North Carolina State University, Raleigh, North Carolina, 1977. 130 pp. (Report) (KAPPA p. 148-150)

PROGRAM DESCRIPTION

"The purpose of this project was to develop and evaluate the effectiveness of a series of educational experiences in changing adolescents' attitudes toward the aged." The educational experiences were specifically developed as part of the study and consisted of six two-hour sessions of a seminar and six one-hour interview sessions. The study employed an experimental research design that established three experimental groups: one attending only the seminar, one conducting the interviews only, and one participating in both experiences. The fourth group served as a control and did not participate in these activities.

The educational experiences were planned and developed by the researchers who also trained adult volunteer leaders recruited for the project. It appears that the youth were not aware that they were involved in a study of attitude change, but were engaged in a project called "The American Heritage Project." "It was felt that young people would be reluctant to interview older persons if no use was to be made of the interviews. As a part of the interviewing project, the youth were asked to write a biography of the person they interviewed. Volunteer leaders, with English or journalism backgrounds, were recruited to work with the young people . . . through offering advice and helping to edit the manuscripts."

The population for this study consisted of 4-H club members between the ages of 13 and 18 residing in North Carolina. The study was conducted in nine counties of North Carolina.

EVALUATION APPROACH/METHOD

The following excerpt from the report identifies the purpose and specific questions addressed by the study.

> "The central purpose of this study was to determine whether adolescents' attitudes toward the aged could be changed in a positive direction through planned educational experiences designed specifically to change attitudes. A second purpose was to determine the extent to which certain personal and situational characteristics of adolescents were associated with attitudes held toward the aged and attitude change.

The personal and/or situation factors studied include: county of residence, area of state, race, sex, age, number of brothers and/or sisters, birth order, grade in school, whether grandparents live at home, and purpose in life. The latter was intended to reflect "the degree to which a person experiences a sense of meaning and purpose in life." This outlook or attitude was measured by the Purpose of Life Test.

To select a sample for study, the state was divided into three geographical areas -- the mountains, the Piedmont, and the coastal plain. Nine counties were selected at random, three within each area. The Cooperative Extension agents in each county were asked to recruit approximately 40 4-H club members to participate in the project. "Because of the voluntary participation of the youth, it was not possible to randomly select adolescents from all the 4-H club members in the county." After securing the participation of the youths, the Extension agents "arbitrarily assigned" each to either the experimental group or the control group. Thus, one county in each geographical area had an experimental group that participated in a series of six seminars, another county participated in an in-depth interview experience, and another county participated in both the seminar and the in-depth interview experience. Each county had its own control group. Forty 4-H club members in each county participated in the project. Authors made no mention of the extent of interaction between subjects across the experimental and control groups outside project participation.

All four groups, the three experimental and one control, were pre- and postmeasured for their attitude toward the aged using the Kogan O.P. Attitude Scale. The Kogan Scale is a scale of 34 Likert-type statements about older persons with which respondents are asked to agree or disagree on a scale of one to six.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

For each of the treatment groups,as compared to the control group, there was a statistically significant change (.05 level) in attitudes. "The greatest change in attitude was effected in the Seminar-Interview group followed by the Seminar and the Interview groups." However, when the pretest scores were controlled by covariance analysis, there was not a significant difference in the amount of change among the three experimental groups, although the difference between the Interview and Interview-Seminar groups approached statistical significance (P .10).

The analysis seemed to indicate that of the personal/situational factors measured, one characteristic was significantly related to the amount of change -- respondents' attitudes in life. The characteristic of race, while not significantly related to change at the .05 level, did approach that level: i.e., .0563. Whites registered a difference of .19 compared to the nonwhites' difference of only .08.

Other Program Related Findings

"Personal and situational characteristics of the respondents which seemed to account for much of the variance in pretest attitudes toward the aged were 'race' and 'purpose in life.'"

CONCLUSIONS

The authors concluded that "adolescents' attitudes toward the aged can be changed significantly through participation in any one of the three educational experiences examined in this study," and that "the Seminar-Interview, the Interview, or the Seminar would be equally effective."

The authors also drew conclusions regarding the control variables: ". . . adolescent 4-H Club members who possess a more positive sense of meaning and purpose in their own lives will hold more positive attitudes toward life in general and toward the aged specifically. Also, one would expect that the social situation encountered by non-white minority groups in the American society would have an impact upon members' concept of self and purpose in life which, in turn, should influence attitudes."

Trent, C. and Kinlaw, Rachel. "The Effectiveness of Three Media in Disseminating Basic Information to Low-Income Families," Center for Rural Resource Development Report No. 3, North Carolina State University, Raleigh, North Carolina, 1976. 52 pp. (Report) (KAPPA pp. 214-217)

PROGRAM DESCRIPTION

This study presented an experimental nutritional information dissemination project within the Expanded Food and Nutrition Education Program (EFNEP) in North Carolina. (The time period is not presented.) The purpose of the project was to improve nutrition knowledge and practices among low-income homemakers in North Carolina.

The project was delivered by direct mailings of information leaflets, circular letters, and cartoon booklets sent to samples of EFNEP participants.

The EFNEP participant population consisted of 11,050 homemakers in 97 North Carolina counties. A computerized random selection procedure selected the 18 counties used in the study. Selection was based on population density and geographic location. A random sample of 48 homemakers was taken from the list of EFNEP homemakers in each county. Twelve homemakers were randomly assigned to each of the three experimental groups and the control group in each county. (There is no explanation given of participant dropout rate, although the number of respondents varied from 667 to 700.)

EVALUATION APPROACH/METHOD

The general objective of the evaluation was to determine and compare the relative effectiveness of the three media above used to disseminate basic foods and nutrition information to low-income homemakers. Specific objectives of the study included the following:

(1) To develop a profile of the EFNEP homemaker in North Carolina based on selected characteristics;

(2) To determine the degree to which nutrition knowledge and practice change was associated with various personal characteristics (e.g., age, education, race, etc.);

(3) To determine and compare the amount of nutrition knowledge and practice change occurring in participants during the experiment by the medium received;

(4) To determine homemakers' attitudes toward information leaflets, circular leaflets, and cartoon booklets as educational communications media;

(5) To determine the degree to which homemakers' attitudes toward the medium received were associated with various personal characteristics;

(6) To determine the degree to which homemakers' attitudes toward EFNEP were associated with the medium received;

The study utilized the test-treatment-retest design. Data were collected by personal interviews conducted by EFNEP paraprofessional aides. The same instrument was used for pre- and post-testing. (The time interval between tests is not presented.) The instrument was pretested with three groups of low-income EFNEP homemakers in two counties not included in the sample. Analysis employed was the least squares of analysis of variance.

FINDINGS

KASA (knowledge, attitudes, skills, and aspirations)

There was a significant change in nutrition knowledge among all homemakers from pre- to post-test. For the experimental group receiving the leaflet, the mean pre-test score was 21.5 and the mean post-test score was 26.1 on a scale of 58, for a mean difference of 4.6. For those groups receiving the cartoon booklet and the circular, the mean differences between pre- and post-tests were 4.3 and 4.5 respectively. For the control group, the mean difference between the pre- and post-tests was 3.7. No one media appeared to be more effective than another in implementing changes in nutrition knowledge.

The respondents expressing the more positive attitudes toward the medium received showed significantly more knowledge change than those with less positive attitudes.

Practices

There was a significant change in practices among all homemakers from pre-test to post-test. The greatest change in practices occurred within the experimental group receiving the circular letter, followed by the group receiving the cartoon booklet. The control group was third and the leaflet group was fourth. The mean differences between the pre- and post-test practice scores in order of those groups with the greatest practice change to those with the least are: circular letter group: 1.37; cartoon booklet group: 1.04;control group: 0.95; and the leaflet group: 0.80. No one of the media appeared to be more effective than another in implementing changes in practice.

Other Program Related Findings

The "typical" North Carolina EFNEP homemaker participating in this study was more likely to be black, to be less than 40 years of age, a rural resident, to have had some high school education, to not work outside the home, to have a positive attitude toward EFNEP, and most often lived in a household with four other people.

There was a significant relationship in differences in knowledge gain by geographical zone and the medium received. Those participants in the eastern zone in the state had a mean difference between pre- and post-tests of 4.8 as compared with those participants in the western zone with a mean difference of 4.5 and in the central zone with a mean difference of 3.5

The attitudes toward all three media were positive, and there was no significant difference in attitudes towards the three media. Overall, the leaflet received the highest attitude rating, followed by the circular letter and the cartoon booklet.

CONCLUSIONS

The major thrust of the study was to determine whether nutrition knowledge and practices of low-income homemakers in North Carolina could be changed significantly through the direct mailing of leaflets, circular letters, and cartoon booklets to their homes. The analysis revealed that there was a significant change in both nutrition knowledge and practices among all homemakers in the study from pretest to post-test. The greatest amount of knowledge change occurred within the experimental group receiving the leaflet, followed closely by the circular letter, and next by the group receiving the cartoon booklet. No one of the media appeared to be more effective than another in effecting changes in nutrition knowledge or practice change, including the control group.

The significant change in nutrition knowledge and practices exhibited by the control group and the consequent lack of significant difference in nutrition knowledge and practice change between the experimental groups and the control group might be explained by the fact that the respondents were aware that they were participating in a research project and,through their desire to achieve, actively sought information and learned on their own. Another explanation might be simply an increased awareness of the subject matter stemming from the pretest. Thus, one might conclude that the leaflet, the circular letter, the cartoon booklet, and the assessment of nutrition knowledge and practices of homemakers would be equally effective in effecting nutrition knowledge and practice change in low-income homemakers.

Warren, R.D., Beal, G.M., Bohlen, J.M. and Hougen, R.E. "The Experimental Dealer Training Program." Rural Sociology Reports 37 and 56, Iowa State University of Science and Technology. 1966. (SMC pp. 37-39)

PROGRAM DESCRIPTION

An experimental training program was conducted for retail farm supply dealers (general managers) who sold fertilizer and agricultural chemicals as two of their product lines. The program was conducted by the Agricultural Extension Service at Iowa State University in cooperation with the Tennessee Valley Authority (TVA). It consisted of intensive training for ten local retail farm supply and marketing dealers with the following intended outcomes: gains in knowledge by dealers in the areas of basic business management and merchandising and the uses of fertilizer and agricultural chemicals; provision of better advice from dealers to farmers regarding the use of fertilizer and chemicals; an increased volume, efficiency, and profits for dealers' business; an increased volume and marginal profitability of fertilizer and chemicals; and optimal use of fertilizer and chemicals by farmers.

The training program consisted of a five-day workshop with a series of followup meetings. The leaders included Iowa State University staff, representatives of TVA, the National Plant Food Institute, the fertilizer industry, a consulting firm, and a private retail dealer.

EVALUATION APPROACH/METHOD

The project was conducted to evaluate the effectiveness of the intensive teaching approach for dealers in changing the fertilizer use practices of farmers. A treatment and a control group of local fertilizer and chemical dealers was established using criteria relating mainly to their volume of sales of fertilizer ($15,000 and over during the year preceding the study), their willingness to participate, and the location of their business (to obtain relatively homogeneous fertilizer and chemical use patterns in the area). A series of hypotheses were constructed which postulated that the treatment group members would change their knowledge, attitudes, and perceptions regarding the management of their business, their roles as advisers for their farmer-customers, and the uses of fertilizers and agricultural chemicals significantly more than the control group over the three-year period.

A reconnaisance survey was conducted in a nine-county area in north central Iowa, which produced a total of 54 qualified dealers. A series of 16 variables were used to select eight matched pairs of dealers from this group. One of each pair was randomly selected for participation, while the other was designated as a control. Two other dealers who requested to participate were included in the treatment group, for a total of 10, with eight control dealers. Due mainly to changes of managers within some of the businesses, only four matched pairs were left intact at the end of a three-year period.

Personal interviews were conducted with members of both groups shortly before the training began. Interim and terminal interviews were also conducted, in which financial and operational data were collected about their business, along with data on dealers' knowledge and attitudes in the areas of management, fertilizer, and agricultural chemicals.

A random sample of farmers from the trade area of each dealer was interviewed at the outset of the training, to obtain information about current practices, attitudes, opinions, and information sources concerning fertilizer and agricultural chemicals.

The differences between the treatment and control groups, in their knowledge and attitudes regarding fertilizer, sales practices, their roles in relation to their farmer customers, and business management practices were statistically tested for significance using the t-test.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

Significant differences were apparent in the treatment group members' knowledge of planned fertilizer programs, the concept of present versus future value of money, and of farmers' perceptions of factors limiting fertilizer use. The control group showed no difference in the same time period.

Fifty percent of treatment general managers increased their knowledge scores in the areas of fertilizer principles, demonstration purposes, and chemical principles, while only 20% of the control group performed similarly. The difference was not significant.

Eighty eight percent of the treatment group increased their knowledge of the functions of management, as compared to 40% of the control group. This was not a significant difference.

Statistically significant differences were found in the treatment group members' greater degree of perception of the increased adequacy in providing fertilizer information to farmers, and of the importance of the fertilizer department to the total business. Attitudes of treatment group members toward learning economic principles were significantly different (on an attitude index) than those of the control group.

Approximately 38% of the treatment general managers changed their perceptions of the importance of the agricultural chemicals department to the total business, which none of the control group changed. This was not statistically significant.

The perception of increased adequacy in providing chemical information to farmers was found to be increased among 63% of the treatment group, as compared to 20% of the control group. The difference is not significant.

Practices

The procedures used for allocation of advertising funds were changed by the treatment group to a significant extent as compared with the control group.

The mean score for the treatment general managers was larger than the mean score for the control general managers on 13 business management practices.

The trend was not in favor of either the treatment or control general managers for four business management techniques.

CONCLUSION

The general hypotheses concerning the areas of knowledge, attitudes, performance, general management, firm and economic variables were not supported.

Within the limitations of sample size and length of training, the training program brought about changes in selected areas of knowledge, attitudes, and performance.

Yerka, Bettie Lee. "Effectiveness of Paraprofessionals in Working with Low-Income Families: An Experimental Study," The Graduate School, Syracuse University, Syracuse, New York, May 1974. 355 pp. (Thesis) (KAPPA pp. 224-26)

PROGRAM DESCRIPTION

This study presented the USDA's Cooperative Extension Expanded Food and Nutrition Education Program for Low-Income Families in an inner-city community of New York City. The purpose of the program was to improve nutrition knowledge and behavior of low-income clientele. The program was delivered by paraprofessional aides trained by an on-site project staff of three nutritionists. The aides conducted personal visits and demonstrations for individual homemakers as well as for groups of homemakers.

EVALUATION APPROACH/METHOD

The purpose of the study was to determine the relationships between the paraprofessionals' knowledge and understanding of teaching-learning strategies, the attitudes they held toward the job, their job-related persistence and performance, the level of desired practices attained, program information recalled, and recognition of assistance received by program clientele.

Design of this study included pre and post-tests with comparison and experimental groups of homemakers, served by a group of paraprofessional aides (n=20) who were also pre- and post-tested. The experimental homemaker sample was taken from a total of 264 active clients who had each been taught by one paraprofessional in the program over at least an eight-month period of time and who had had measurements taken twice of their recall of nutritional knowledge and of their food consumption behavior. A 17 percent random selection process was used to determine a final sample (n=76) of experimental clientele. Homemakers in the experimental group were randomly assigned to aides. Sample homemakers who had had only initial contact with paraprofessionals and who also had had the initial knowledge and food consumption measurements. A random sampling procedure selected 13 homemakers for comparison. A majority of the comparison group sample had moved or were otherwise unavailable; thus, the small comparison group size (n=13).

Data were collected by personal interviews, from summer 1972 through fall-winter 1972-1973, conducted by college students from the community. Instruments used for the homemaker interviews included USDA family records, 24-hour food recall, and the interview. For the paraprofessional interview the instruments included interview-achievement schedules, an attitude scale, and job persistence forms.

Various statistical analyses were utilized to profile the paraprofessional's knowledge and attitudes, determine significant differences in achievement between the two homemaker groups, and to indicate the degree to which various paraprofessional characteristics were predictors of their effectiveness with homemakers.

FINDINGS

KASA (knowledge, attitudes, skills, aspirations)

The experimental group had a mean of 4.26, and the comparison group 3.54 in nutritional knowledge scores (p .05, range 0-5). There were significant differences between experimental and control group scores on five items of a seven-item attitude-behavior scale, with the experimental women always attaining higher scores.

Practices

The experimental group had a mean of 9.22 compared to the comparison group mean of 8.23 on the gross food consumption scores (p .10, range 0-12).

The experimental group scored 1.75 compared to 1.38 for the comparison group on nutritional level scores (p .025, range 0.4).

Other Program Related Findings

The paraprofessional variable, correlating most often and highly with the criterion homemaker measures, was knowledge of teaching/learning which was associated with homemaker attitudes, behavior (r=.52), homemaker nutritional knowledge (r=.41), and homemaker nutritional level (r=.35).

CONCLUSIONS

The experimental group had higher nutritional intakes and levels of knowledge than the control group. With exposure to the paraprofessionals, favorable attitudes and specific behavior were identified. There was a direct relationship between the paraprofessionals' knowledge of teaching and learning and the homemakers' recall of the program information and recognition of assistance received; attitudes toward the job and homemakers' recall of program information; on-the-job performance and homemakers' improved nutritional practices. Paraprofessionals who were studied demonstrated a capacity to help clientele improve specific practices, knowledge, and their families' lives in many related ways.

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